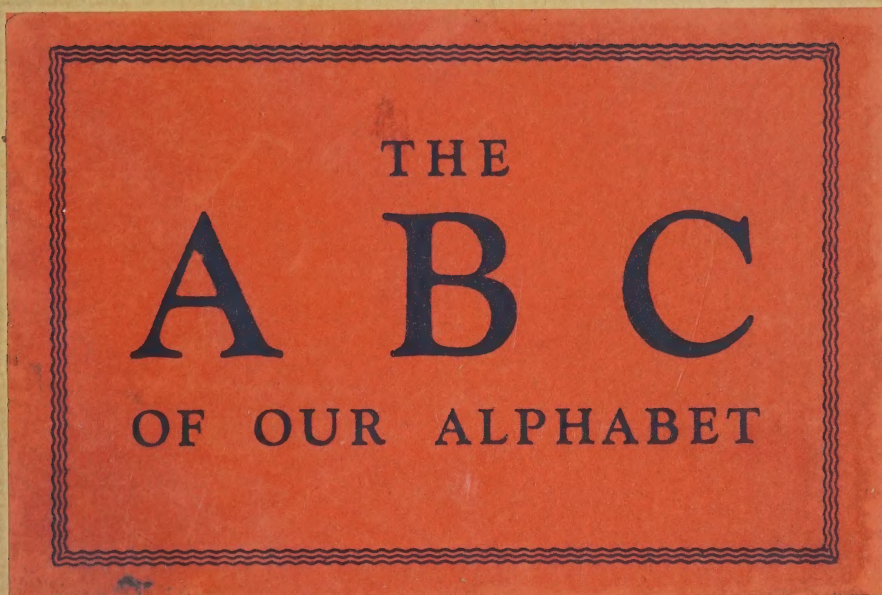


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THE
A B C
OF OUR
ALPHABET

T O N O R M A N
T O
L E A R N W I T H



THE WORLD ACCORDING TO ERATOSTHENES + 200 B.C.

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THE
A B C

OF OUR
ALPHABET



TOMMY THOMPSON

THE STUDIO PUBLICATIONS, LONDON & NEW YORK

1942

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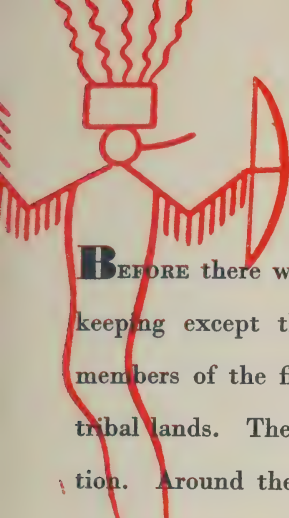
INTRODUCTION

LETTERS, as you are reading them in words on this page, have not always been man's possession, nor have they always had the same forms. Most of the twenty-six letters of our alphabet are the simplified drawings of the idea-pictures they were in the beginning. Little is left in the letters today to remind us of their pictorial origins. Each letter has a long life history running back in time to before the age when the Pyramids of Egypt were built, over five thousand years ago. Countless generations of artists and scribes have drawn, shaped and slowly changed the characters until they now bear little resemblance to the pictures they were in the beginning. Each generation of successive letter makers simplified the forms, using them for their own time and changing methods of writing, and passed them on a little altered as a wonderful inheritance to future generations.

These printed letters on this page, grouped as they are, spell out the words syllable for syllable as they are pronounced and convey to the reader exactly the same thoughts that the writer wished to express. This code of transmission of thought may be called the highest attainment of the human mind. This agreed method of the use of symbols to convey thoughts, record facts, ideas and ideals and conserve them for future generations has been the greatest factor in man's intellectual growth and spiritual thought. It has carried him out of the jungle and led him toward civilization.

To guide the reader along the romantic path the alphabet has followed and to stimulate a wider interest in these twenty-six adventurers, the characters who will for so long be his companions, and perhaps to arouse in him a desire to enlarge his understanding of them, this book has been prepared.

TOMMY THOMPSON, San Francisco.



ONCE UPON A TIME

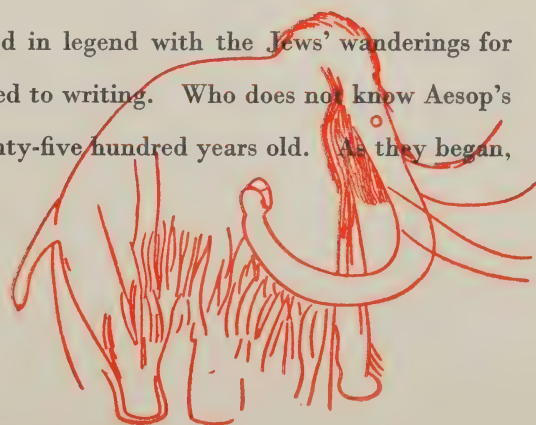
BEFORE there was the necessity, the idea of writing or any other method of record keeping except the natural development of the memory was unthought of. The members of the first tribes seldom ventured beyond the natural boundaries of their tribal lands. The voice, the drum, the horn and rude signals sufficed for communication. Around the domestic hearth the events of the day were discussed. Whatever lore of nature and human well-being had been gained by the experiences of one generation was related by the parent to the child and lived with other traditions in their memories.

*Grass Spirit
of the
Ojibwas.*

Medicine men and story-tellers were selected for their personalities and gift of memory ability. This was in the early days when the memory had no mechanical aids nor dependence on notes of any kind. At religious ceremonies the young men were instructed in the mystic rituals, and were taught the great epics of the tribe, to hand them on in turn.

The first hymns, chants, jingles and tunes were invented by the story-teller to assist his memory. The Homeric epics, the Iliad and the Odyssey have evidence of being composed in the childhood of Greece. Homer was a wandering minstrel who gathered in his poems the knowledge of his day. He recited them to the youth of Greece to inspire valour and virtue. The minstrels and bards of Gaul, Britain, Ireland, Scotland, Scandinavia and Germany all played their part in spreading knowledge of news and history before writing was known in any of their countries.

Many of the 'books' of the Bible lived in legend with the Jews' wanderings for hundreds of years before they were committed to writing. Who does not know Aesop's fables? These moral concepts are over twenty-five hundred years old. As they began, they have lived by the telling.



*Mammoth from the Grotto at
Combarelles (Dordogne), France.*

The stories, poems and songs made a nation, a religion and a language and became official in questions of history, religion and social policy. Their essential composition has changed little with the passing of time, hence their great value to historians as records.

At first, man's knowledge was carried in his head, in the ages before writing or record keeping was understood or needed. When for some reason his memory weakened, he employed reminders, poems and songs, notched sticks and knotted cords. Then he

made signs and drawings.

As man rose from his primitive state toward civilization he must have felt a need of recording his knowledge in some permanent form. A great stride in the direction of writing was taken when the cave-dweller began to express his inborn desire to imitate the forms of natural objects about him. The beginnings of writing are laid in pictorial art, the natural method of graphic expression.

Much of the record of the lives of the oldest race of men known to have lived on the earth has been found in the drawings and paintings left by the cave-dwellers of Central Europe. Scientists place these men at the close of the last glacial period, at the time the long extinct arctic and semi-arctic mammoth, woolly-haired rhinoceros, wild ox and box-bison roamed in Europe. As life itself depended on the success of the hunt, it is natural that Palæolithic Man first drew pictures of the beasts on whose flesh he fed.

At some remote time in his little known past, in the feeble light of his rush torch or grease lamp, in the warmth of his hearth fire and the security of his cave, with a splinter of bone or flint, primitive man traced the first image in the clay. Possibly his fellows beheld him in awe and spared him from the hunt to carry on his newly discovered magic. In return for his food and shelter this first image maker decorated their caves, weapons and utensils and still found time to concoct his witchcraft, invent his gods, mystify his fellows and generally improve his standing in the community. When he drew pictures on the walls of his cave, or wove a design into a piece of cloth, that was Art. When he drew ideas into his pictures to be conveyed to others, he had begun to write.

Bison in Polychrome. Grotto of Altamira, Spain.



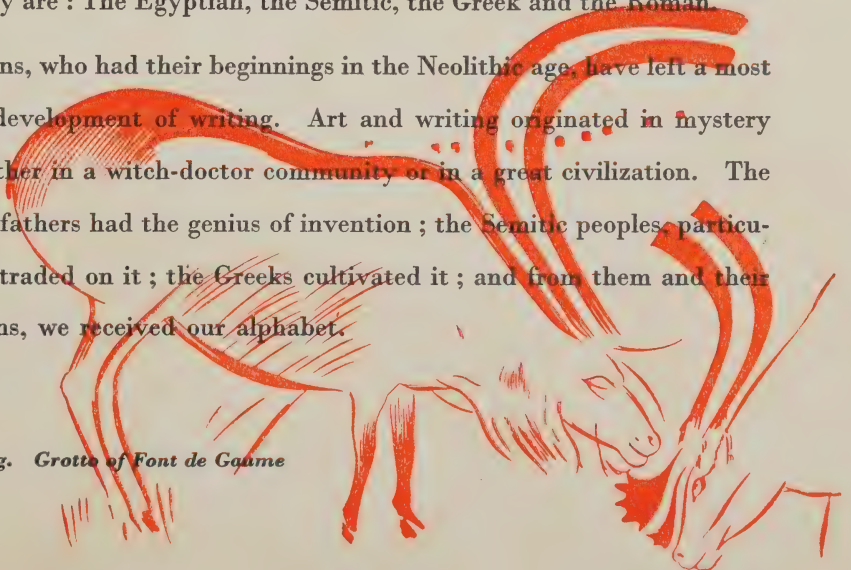
*Slate Carving of the
Lenape Indians, found near
Doylestown, Pennsylvania.*

Palæolithic Man cut with flints and painted with coloured earths and vegetable dyes upon the rocky walls of his caves. He carved upon rude stone implements and etched upon the bones and tusks of now extinct animals before metal was used or known. He copied the natural forms about him, thus creating graphic expression. Perhaps to him should the credit for the invention of writing be given. His descendant, Neolithic Man, reduced realism to convention and then reduced conventional form to abstract form. When man deserted his natural cave for a pile-dwelling beside a lake, he advanced himself in the realm of artifice. Though unskilled in intellect, Primitive Man had found the means of recording something of his past.

Our alphabet has come to us down a long and adventurous path through many lands. Of the many civilizations of the past who possessed practical systems of writing and in some way contributed to the 'idea' and 'substance' of our alphabet, we remain most indebted to four. They are : The Egyptian, the Semitic, the Greek and the Roman.

The early Egyptians, who had their beginnings in the Neolithic age, have left a most perfect record of the development of writing. Art and writing originated in mystery in the priesthood, whether in a witch-doctor community or in a great civilization. The Egyptians or their forefathers had the genius of invention ; the Semitic peoples, particularly the Phoenicians, traded on it ; the Greeks cultivated it ; and from them and their conquerors, the Romans, we received our alphabet.

*Reindeer. Point Engraving. Grotto of Font de Gaume
(Dordogne), France.*



PROGRESSION

THE successive stages of writing may be simply grouped in this way :

PICTOGRAPHIC

Drawings of natural objects. Disconnected and fragmentary pictures. Connected stories, songs and epics. Man made articles. (No connection between the spoken word and the object pictured. Only a closely recognized one of the picture recalling the thing itself to mind, not its name.)

IDEOGRAPHIC *(The starting point in institutional writing.)*

A definite picture, conventional and simplified, selected by agreement or custom from the many experimental pictures, that became a fixed pictorial symbol of its name. The name of the object (or its action) is closely identified with the picture. Writing in all languages has passed through, or halted, at this stage.

PHONETIC

Syllabic signs and symbols. True alphabetic characters. Conventional symbols representing primary oral sounds. The letters in our alphabet are the simplified renderings of their pictorial beginnings. They have diminished in resemblance to their originals as time has passed. But, each letter in our alphabet may still be called a picture of a sound.

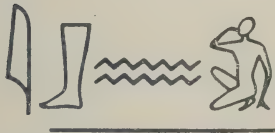
The first illustration is a pictographic 'note' drawn on wood by an Eskimo and left in a conspicuous place near the door of his habitation to inform visitors and friends of his departure and his intention to hunt. The Eskimo, living on the isolated coasts of the Bering Sea and Pacific Ocean, practises a primitive form of pictographic writing. A linear translation of the Aigaluxamut dialect (which the native speaks and in which he



would read the message) follows : “ I there (to that place) go (with boat) that island one sleep there, then I go another island there two sleeps (nights) I catch one sea lion then return to (place) mine.



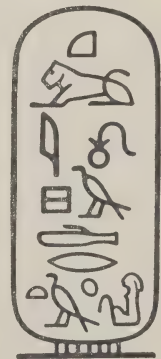
Chinese writing illustrates most clearly an ideographic form of writing. Ancient ideographs and modern Chinese characters, into which they in time developed, are shown side by side.



The Egyptians were the first men to develop their pictographs into alphabetic characters and employ them in writing.

But they continued also to use them as ideographic determinatives. Illustrated is a combination of two of their alphabetic characters, AB, their word for ‘thirst.’ Two ideograms are added, the symbol for water, and a man pointing to his mouth. It becomes clear that the scribe meant to signify ‘thirst for water.’ Had he meant to write a ‘thirst for knowledge,’ he would no doubt have pictured the materials for writing, a split reed and a hanging ink bottle as carried by the scribes, or a papyrus roll as the determinative sign.

The cartouche contains the name Cleopatra (KLEOPATRA) spelled out with alphabetic characters ; the quadrant, K ; the lion, L ; the reed, I (English E) ; the knotted cord, O ; the shutter, P ; the eagle, A ; the hand, T ; the mouth, R ; and the eagle, A. The egg indicates the feminine gender, and the image signifies that the one intended is a deified person.





PICTURE WRITING



IN primitive times, as man advanced in the scale of civilization and tribal life became more complex, and as tribes came into mutual contact with each other enlarging their scope of life and action, verbal speech proved inadequate as a means of communication.

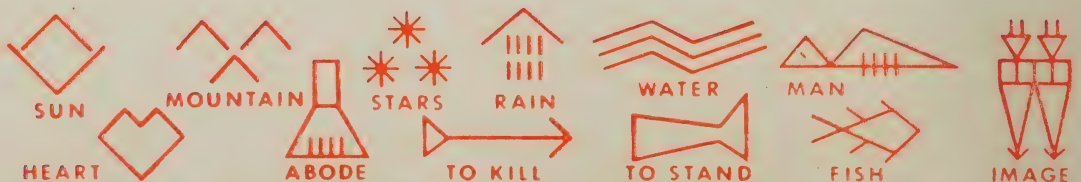
It became necessary through wars, in self-preservation, to adopt a means of communication which could be mutually understood by various tribes. A treaty, truce or conference could only be conducted by the use of a primary sign-language.

A system of gestures and hand signs came into use. This use of the hands can be likened to writing in air. It was not so much the movements of the hands as the picture of the movements that eventually became the written signs.

If an Indian wished to say you were not truthful, he would touch his tongue with one finger, and hold up two fingers towards you, thus signifying that you were two-tongued or untruthful. If he desired to tell you that a place was a number of days distant in travel, he could signify 'travel' with the first two fingers of his hand, moving one ahead of the other, as a man moves his legs in walking; then incline his head as if asleep, and hold up as many fingers as there were sleeps, meaning nights, to indicate days of travel necessary to reach the place in question.

Later when these signs were drawn, a moon meant a month. A sun meant a day.

A man's legs or his foot became symbols for walking and a reclining figure or a hand



North
America

Mesopotamia

placed at the side of the head stood for sleep. Three suns or a sun with three marks meant three days. The mouth was drawn for speaking, the eye for seeing, and the ear for hearing.

The crude attempts of primitive man to record his thoughts and deeds are pitiful in their failure of purpose. An inscription, made to refresh the memory, often called too much on the imagination of the reader and could be interpreted in several ways, or its meaning could be completely forgotten. Until man could leave behind him an exact instrument of record, his store of knowledge could not expand. A race of people that could not develop a fixed method of writing, as did the Egyptians and the Babylonians, must therefore remain a backward or a childlike people. The nations that did develop and employ a simple syllabic or alphabetic form of writing rose to the front ranks of the civilizations of their time, while those who did not remained more or less in the primitive state.

Among the many tribes of the North American Indian, especially those dwelling east of the Mississippi River, perforated shell beads, called wampum, were woven into articles of personal adornment. It was used in many forms as a medium of exchange of goods and property. From its use as currency among them it seemed but a natural step to utilize wampum in sealing compacts and treaties. It thus came about that wampum was used as a medium for writing.

Pictographs were woven into the belts and collars to record important events. At a certain season each year the belts were taken from the treasure house and exposed to



Egypt



China

the whole tribe, while the history and import of each was publicly recited. The Indians referred to the belts as public records.

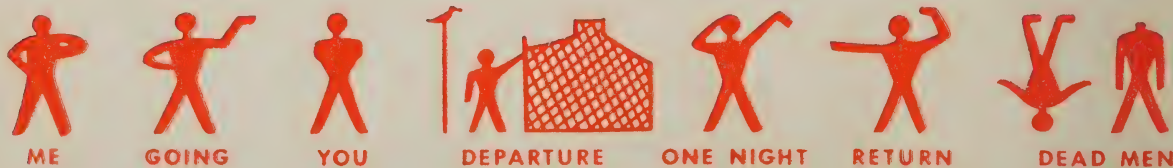
When the wampum belts were exchanged by the Indians in ratifying treaties between tribes, the symbols portrayed the principal events and the complete idea was memorized by the 'keepers of the wampum.' If the event could not be put in drawing, any simple form or pattern was agreed upon. At certain seasons the contracting tribes met to review the ideas of which the wampum belts were the emblems.

The uncertainty of this method is obvious. It is not surprising to learn through their history, of the pitiful misunderstandings between contracting tribes in regard to the true interpretation of certain compacts over which wampum belts had been exchanged. Captain de Lamothe Cadillac in 1703 tells of an Indian chief whose nation had received through the hands of the Ottawas a wampum collar from the Iroquois. They had had it some time, the chief pathetically said, and "The old men had forgotten what the collar said."

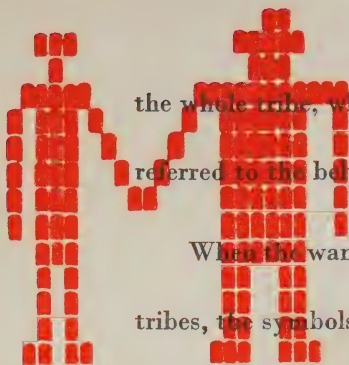
One of the most successful attempts at pictography with wampum is the famous Penn Treaty belt given by the Leni-Lenape chiefs to William Penn at the time of their treaty at Shackamaxon on the Delaware River in 1682.

The figures of a white man and an Indian are woven in the belt, clasping hands in a true gesture of friendship. The white man is portrayed wearing a hat, as the Indian always drew the symbol of the white man. This treaty of peace was never broken or forgotten.

*Eskimo
Pictographs.*



*Figures
from Leni-
Lenape-
Penn Treaty
Belt. Penn.
Hist. Society.*





Chippewa Petition to the United States Government.

The likeness of an important petition presented to the United States Government in January, 1849 by a delegation of Chippewa Indians from Lake Superior is shown on this page.

In lieu of official credentials they presented a pictographic petition consisting of five sheets of white birch bark on which were drawn the totems of the different members of the band. The illustration shows the first sheet of the petition. The chief is the leader of the delegation, he is of the Crane clan. Following him are three members of the Marten clan. The other three members of the party are representative of the Bear, Man Fish, and Cat Fish clans. The lines from the eye and Valentine heart of the Crane to the eyes and hearts of his fellows indicates 'union of views,' and 'utility of purpose.' The line from the eye of the chief forward is meant to lead to the eye of President Polk. The one leading backward to the small lakes indicates the desired grant, which constitutes the object of the journey. The long parallel lines across the sheet represent Lake Superior, and the short parallel lines are a path leading from some central point on its southern





Winter Count of the Dakota Nation, 1800-1870.

shore to the villages and interior lakes, at which place the Indians desired to settle in peace. This is an excellent example of picture writing developed to an advanced state.

The Dakota and Sioux Indians about a century ago kept tribal diaries, known as 'winter count,' wherein were recorded the principal events of each winter. They were painted on skins, sometimes on a tent set apart for this purpose. Each ideographic picture stood for one winter and recorded the most important event of that year. The most noted count was the one kept by the Dakota nation and painted on a buffalo robe. It was begun in 1800-01 by Lone Dog and was maintained for a period of seventy-one years.

In it are recorded the first flag winter (when the first United States flag was seen), smallpox used them all up again winter, and the horseshoe winter (when the first shod horse was seen).

It depicts the moon with stars darting across it, to record the winter of 1833-34, no doubt recording the great meteoric shower over the United States which occurred on the evening of November 12, 1833. The Indians explain it as the 'plenty stars winter.'

The pictograph drawn to symbolize the year 1855 is of an Indian taking the hand of a white man, recording the treaty of peace made in that year by General Harvey with certain tribes of the Dakotas. The first winter pictured, that for the year 1800-01, seen in the lower middle part of the robe, symbolizes 'thirty Dakotas killed by Crow Indians.'

The winter of 1801-02 was the 'smallpox used them all up again winter.' During



*Notched
Stick
cattle count,
California.*

the winter of 1805-06 the enemy killed eight Dakotas. The casualties were neatly marked and crossed off. 'Many eagles caught winter' is pictured with a 'brave catching an eagle.' This the Indian accomplished by a method as simple as the picture shows..... by baiting a hole in the earth and waiting in it.

What appears to be a sun-burst in the upper right corner is a pictograph of a stockade held against attack. Beneath this is a note of a 'buffalo very plenty winter' successfully brought about by the 'made medicine winters' preceding it. The dark sun with stars around it records the total eclipse of the sun, which occurred in 1869.

The drawings in this 'count' show a marked improvement over earlier Indian pictographs but they bear no evidence that the Indian would ever have developed a phonetic form of writing.

*Peace
offering to
U.S. Gov't.
by the
Pueblos.*

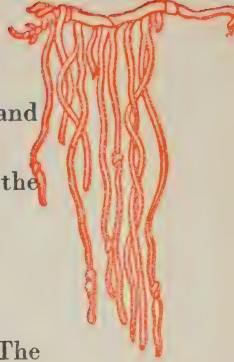
I have used these illustrations of the writing of the North American Indian, not because he contributed anything to our alphabet, but because his form of sign language and picture writing was the same when the first European discoverers found him on his isolated continent as the writing of the ancient Egyptians must have been many thousands of years ago, before they developed their hieroglyphic picture alphabet. The period of time when the Egyptian hieroglyphs were evolved is lost in antiquity. Before Abraham

In the year 1852 a message reached the President of the United States in the form of a diplomatic packet, presented with the customary peace pipe, by a delegation of the Pueblos of New Mexico, offering him friendship and negotiation; and opening symbolically, a road from the Moqui country to Washington.

The objects in the packet refresh the memory of the interpreter, who remarks, "These two figures

represent the Moqui people and the President; the cord is the road which separates them; the feather tied to the cord is the meeting point; that part of the cord which is white signifies the distance between the Moqui and the place of meeting; and that part which is stained is the distance between the President and the same point. Your Excellency will perceive that the distance between the Moqui and the place of

founded the Hebrew nation, while the Greeks were living in a state of barbarism and before the great pyramids were built, alphabetic writing, complete in form, with the use of vowels and consonants, was in use in the land of the Nile.



Peruvian
Quipu.

One may seek in vain in Egypt for examples of writing in its very infancy. The picture writing of the American Indian is typical of the work of all aboriginal peoples and examples may be readily found in many museums. Our story can continue clearer with an examination of his work at this point, for the writing of the American Indian is the writing of the stone age man. It clearly represents an important step in the development of our alphabet.

Early man etched in stone, animal bone and wood. He carved and painted with vegetable dyes and earth pigments on wood, papyrus, bark and other perishable surfaces. For the most part his early work is lost, only his most monumental efforts in stone have been preserved for us. Man drew before he carved, so it must remain conjecture at just what period in time phonetic writing was first used by man.

It is a pity to note that the method of writing employed by the American Indian was crude and impractical, slow to develop and long in use, and prevented in its growth for all time by the invasion of the white man. Still it is to be remembered that our ancestors

meeting is short, while the other is very long." (The group of feathers between the white and coloured cords symbolizes the geographical position of the Navajos with respect to Washington.)

This primitive form of memory aid or *object writing* constitutes one of the earliest methods of writing. It was used alike by all peoples previous to

picture writing. To this class called 'mnemonic records' belongs the quippus or knotted cords, by which the Incas of Peru transmitted orders to the outlying provinces of their empire. To this class also belongs the wampum explained earlier, and the notched sticks and cord tallies used by the early Britons.



of Northern and Western Europe possessed no knowledge of picture writing when Caesar's armies introduced the Roman alphabet among them in the first century. The Britons prior to that time had no method of record keeping unless it was the use of cord tallies and notched sticks.

Although the Indian's method of writing was crude and cumbersome to our eyes, his thought and speech were picturesque. Reproduced here is a pictographic poem, the first of three songs from Rafinsque's *Walam Olum* of the Leni-Lenape Indians, with what I believe to be its authentic translation. It is one of the most remarkable documents ever inscribed by an uncivilized race. It describes the creation and philosophy of the universe according to the viewpoint of the Indian.



At first, in that place, at all times, above the earth.



On the earth an extended fog, and there the great Manito was.



At first, forever, lost in space, everywhere, the great Manito was.



He made the extended land and the sky.



He made the sun, the moon, and the stars.



He made them all to move evenly.

*Alaskan
Totem Pole.*



Then the wind blew violently, and it cleared, and the water flowed off far and strong.



And groups of islands grew newly, and then remained.



Anew spoke the great Manito, a manito to manitos.



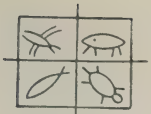
To beings, mortals, souls and all.



And ever after he was a manito to men, and their grandfather.



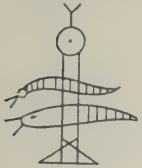
He gave the first mother, the mother of beings.



He gave the fish, he gave the
turtles, he gave the beasts,
he gave the birds.



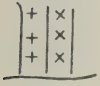
And fetched them food as they
desired it.



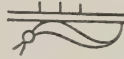
But an evil Manito made evil
beings only, monsters.



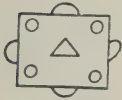
And all had cheerful know-
ledge, all had leisure, all
thought in gladness.



He made the flies, he made the
gnats.



But very secretly an evil being,
a mighty magician came on
earth.



All beings were then friendly.



And brought with him badness,
quarrelling, unhappiness.



Truly the manitos were active
and kindly.



Brought bad weather, brought
sickness, brought death.



To those very first men,
and to those first mothers;
fetched them wishes.

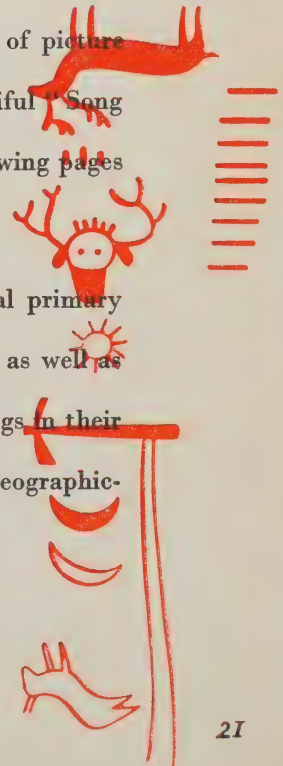


And all this took place of old
on the earth, beyond the
great tidewater, at the first.

Pictorial epitaphs on Indian grave posts were quite common in the early days of the new world. Painted on wood, most of them have perished. But knowledge of this romantic custom as well as the knowledge of the Red Man's art of picture writing will live forever, had there been no other record of him but the beautiful "Song of Hiawatha" by Henry Wadsworth Longfellow. Reprinted on the following pages is the fourteenth chapter of this poem in its entirety.

(There can be no doubt that sign language is a more or less universal primary language. The early Egyptians, the Chinese, and the ancient Babylonians, as well as the North American Indians all used similar symbols for the same meanings in their early attempts at writing, although they were far removed from each other geographically. A comparison is drawn around pages 12 and 13).

Grave Post of Chippewa Chief, Wabojug
Bureau of American Ethnology) after Schoolcraft.



In those days said Hiawatha,
 'Lo! how all things fade and perish!
 From the memory of the old men
 Pass away the great traditions,
 The achievements of the warriors,
 The adventures of the Hunters,
 All the wisdom of the Medas,
 All the craft of the Wabenos,
 All the marvellous dreams and visions
 Of the Jossakeeds, the Prophets!

'Great men die and are forgotten,
 Wise men speak; their words of wisdom
 Perish in the ears that hear them,
 Do not reach the generations
 That, as yet unborn, are waiting
 In the great mysterious darkness
 Of the speechless days that shall be!

'On the grave-posts of our fathers
 Are no signs, no figures painted;
 Who are in those graves we know not,
 Only know they are our fathers.
 Of what kith they are and kindred,
 From what old, ancestral Totem,
 Be it Eagle, Bear or Beaver,
 They descended, this we know not,
 Only know they are our fathers.

'Face to face we speak together,
 But we cannot speak when absent,
 Cannot send our voices from us
 To the friends that dwell afar off;
 Cannot send a secret message,
 But the bearer learns our secret,
 May pervert it, may betray it,
 May reveal it unto others.'

Thus said Hiawatha, walking
 In the solitary forest,
 Pondering, musing in the forest,
 On the welfare of his people.

From his pouch he took his colors,
 Took his paints of different colors,
 On the smooth bark of a birch-tree,
 Painted many shapes and figures,
 Wonderful and mystic figures,
 And each figure had a meaning,
 Each some word or thought suggested.

Gitche Manito the Mighty,
 He, the Master of Life, was painted
 As an egg, with points projecting
 To the four winds of the heavens,
 Everywhere is the Great Spirit,
 Was the meaning of this symbol.

Mitche Manito the Mighty,
 He the dreadful Spirit of Evil,
 As a serpent was depicted,
 As Kenabeek, the great serpent.
 Very crafty, very cunning,
 Is the creeping spirit of Evil,
 Was the meaning of this symbol.

Life and death he drew as circles,
 Life was white, but Death was darkened;
 Sun and moon and stars he painted,
 Man and beast, and fish and reptile,
 Forests, mountains, lakes, and rivers.

For the earth he drew a straight line,
 For the sky a bow above it;
 White the space between for daytime,
 Filled with little stars for night-time;
 On the left a point for sunrise,
 On the right a point for sunset,
 On the top a point for noontide,
 And for rain and cloudy weather
 Waving lines descending from it.

Footprints pointing towards a wigwam
 Were a sign of invitation,
 Were a sign of guests assembling;
 Bloody hands with palms uplifted
 Were a symbol of destruction,
 Were a hostile sign and symbol.

All these things did Hiawatha
 Show unto his wondering people,
 And interpreted their meaning,
 And he said: 'Behold, your grave-posts
 Have no mark, no sign, nor symbol,
 Go and paint them all with figures;
 Each one with its household symbol,
 With its own ancestral Totem;
 So that those who follow after
 May distinguish them and know them.'

And they painted on the grave-posts
 On the graves yet unforgotten,
 Each his own ancestral Totem,
 Each the symbol of his household;

* Chapter XIV from The "Song of Hiawatha" by Henry Wadsworth Longfellow.
 Courtesy of the Houghton Mifflin Company.

Figures of the Bear and Reindeer,
Of the Turtle, Crane and Beaver,
Each inverted as a token
That the owner was departed,
That the chief who bore the symbol
Lay beneath in dust and ashes.

And the Jossakeeds, the Prophets,
The Wabenos, the Magicians,
And the Medicine-men, the Medas,
Painted upon bark and deer-skin
Figures for the songs they chanted,
For each song a separate symbol,
Figures mystical and awful,
Figures strange and brightly colored;
And each figure had its meaning,
Each some magic song suggested.

The Great Spirit, the Creator,
Flashing light through all the heaven;
The Great Serpent, the Kenabeek,
With his bloody crest erected,
Creeping, looking into heaven;
In the sky the sun, that listens,
And the moon eclipsed and dying;
Owl and eagle, crane and henhawk,
And the cormorant, bird of magic;
Headless men, that walk the heavens,
Bodies lying pierced with arrows,
Bloody hands of death uplifted,
Flags on graves, and great war-captains,
Grasping both the earth and heaven!

Such as these the shapes they painted
On the birch-bark and the deer-skin;
Songs of war and songs of hunting,
Songs of medicine and of magic,
All were written in these figures,
For each figure had its meaning,
Each its separate song recorded.

Nor forgotten was the Love-Song,
The most subtle of all medicines,
The most potent spell of magic,
Dangerous more than war or hunting!
Thus the Love-Song was recorded,
Symbol and interpretation.

First a human figure standing,
Painted in the brightest scarlet;

'T is the lover, the musician,
And the meaning is, 'My painting
Makes me powerful over others.'

Then the figure seated, singing,
Playing on a drum of magic,
And the interpretation, 'Listen!
'T is my voice you hear, my singing!'

Then the same red figure seated
In the shelter of a wigwam,
And the meaning of the symbol,
'I will come and sit beside you
In the mystery of my passion!'
Then two figures, man and woman,
Standing hand in hand together
With their hands so clasped together
That they seemed in one united,
And the words thus represented
Are, 'I see your heart within you,
And your cheeks are red with blushes!'

Next the maiden on an island,
In the centre of an island;
And the song this shape suggested
Was, 'Though you were at a distance,
Were upon some far-off island,
Such the spell I cast upon you,
Such the magic power of passion,
I could straightway draw you to me!'

Then the figure of the maiden
Sleeping, and the lover near her,
Whispering to her in her slumbers,
Saying, 'Though you were far from me
In the land of Sleep and Silence,
Still the voice of love would reach you!'

And the last of all the figures
Was a heart within a circle,
Drawn within a magic circle;
And the image had this meaning:
'Naked lies your heart before me,
To your naked heart I whisper!'

Thus it was that Hiawatha,
In his wisdom, taught the people
All the mysteries of painting,
All the art of Picture-Writing,
On the smooth bark of the birch-tree,
On the white skin of the reindeer,
On the grave-posts of the village.

PICTURE
WRITING



THE SECRET WRITING

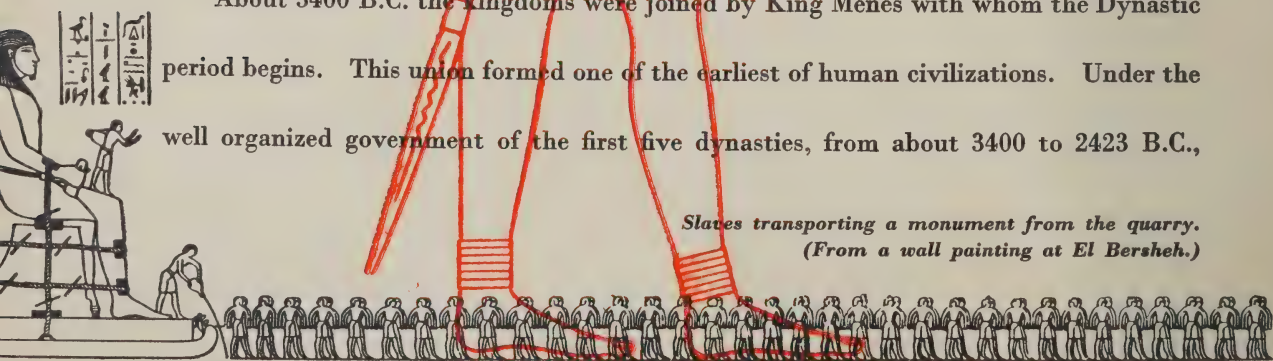
THE earliest remains of human habitation in Egypt have been traced to the old stone age, at least twelve thousand years ago. Early in the new stone age, wandering tribes lived by hunting and fishing in the Nile valley. In time they settled in agricultural communities and cultivated grain and vegetables and domesticated animals. They became skilled in the potter's art and fashioned stone tools and weapons.

From an applied art, the design and decoration of weapons, utensils and trinkets, the priests of Egypt developed the art of drawing into phonetic writing, a form so abstract that it could not be understood by the common man. It remained the secret instrument of the priesthood for thousands of years. In the hieroglyphic writing of the Egyptians we find a more complete story of the development of writing than in that of any other ancient civilization.

During the fourth millennium B.C. the various tribes were united by their common river life into two kingdoms: Upper Egypt, extending along the Nile valley to the delta, and Lower Egypt, comprising the delta area.

About 3400 B.C. the kingdoms were joined by King Menes with whom the Dynastic period begins. This union formed one of the earliest of human civilizations. Under the well organized government of the first five dynasties, from about 3400 to 2423 B.C.,

*Slaves transporting a monument from the quarry.
(From a wall painting at El Bersheh.)*

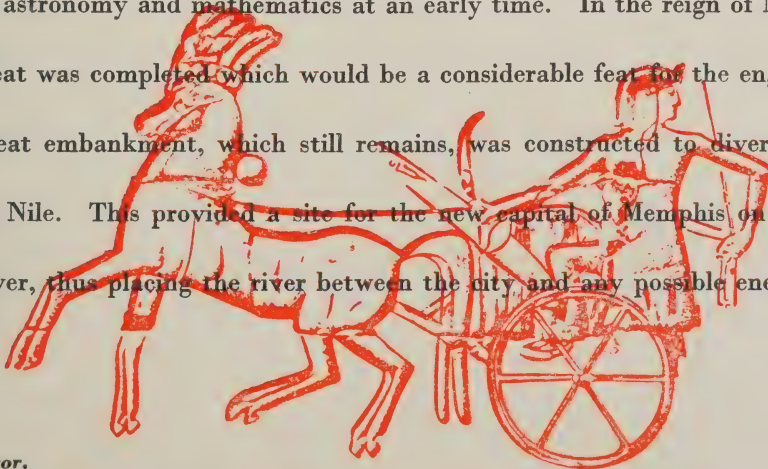


learning and art so flourished that later Egyptians looked back on the Old Kingdom as the classical age, and the forms evolved by the Old Kingdom artists endured for three thousand years.

During life the rulers of the Old Kingdom erected great stone pyramids to serve as their tombs. The home was looked upon as a place of passage and the tomb as the permanent dwelling. The Old Kingdom brought two great developments into the civilization of the Egyptians. They came to believe that in case of accident to the body, statues and portraits in relief would serve as a refuge to the soul. The demand for these tomb portraits caused a rapid development in the art of sculpture. The introduction of metal made stone masonry possible and resulted in a development of architecture.

However, Egypt left to the world of men a thing far greater than tombs and images. Legend tells us of how their God Thoth in the form of an ibis scratched his bill in the shores of the Nile and thus invented writing.

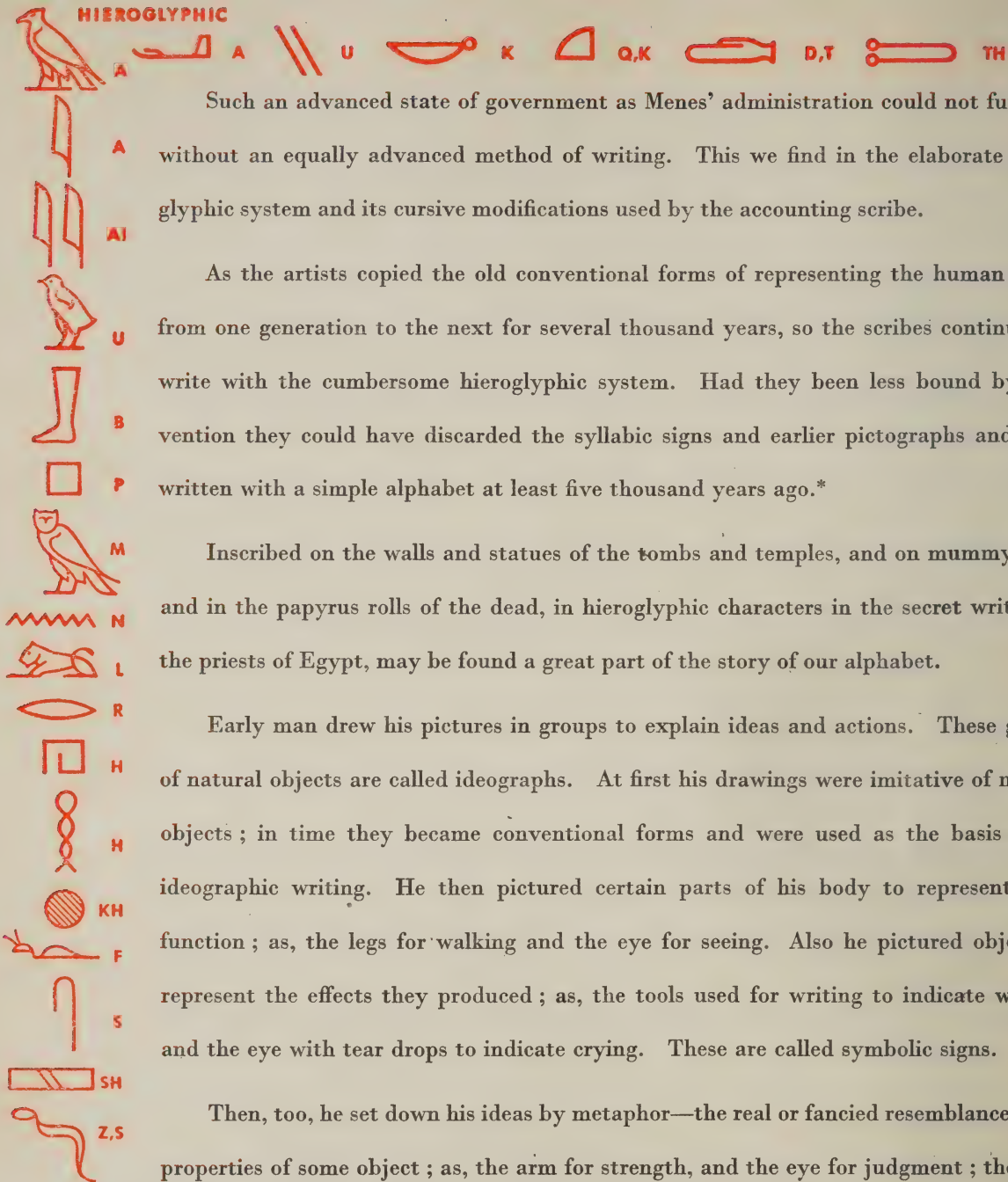
The men of the delta discovered and introduced a calendar year of three hundred and sixty-five days hundreds of years before the time of Menes, proving an advanced knowledge of astronomy and mathematics at an early time. In the reign of Menes, an engineering feat was completed which would be a considerable feat for the engineers of today. A great embankment, which still remains, was constructed to divert the old course of the Nile. This provided a site for the new capital of Memphis on the west side of the river, thus placing the river between the city and any possible enemy from the east.



Black Sculpture of Seti I.
from the Temple at Luxor.



HIEROGLYPHIC



Such an advanced state of government as Menes' administration could not function without an equally advanced method of writing. This we find in the elaborate hieroglyphic system and its cursive modifications used by the accounting scribe.

As the artists copied the old conventional forms of representing the human figure from one generation to the next for several thousand years, so the scribes continued to write with the cumbersome hieroglyphic system. Had they been less bound by convention they could have discarded the syllabic signs and earlier pictographs and have written with a simple alphabet at least five thousand years ago.*

Inscribed on the walls and statues of the tombs and temples, and on mummy-cases and in the papyrus rolls of the dead, in hieroglyphic characters in the secret writing of the priests of Egypt, may be found a great part of the story of our alphabet.

Early man drew his pictures in groups to explain ideas and actions. These groups of natural objects are called ideographs. At first his drawings were imitative of natural objects; in time they became conventional forms and were used as the basis of his ideographic writing. He then pictured certain parts of his body to represent their function; as, the legs for walking and the eye for seeing. Also he pictured objects to represent the effects they produced; as, the tools used for writing to indicate writing, and the eye with tear drops to indicate crying. These are called symbolic signs.

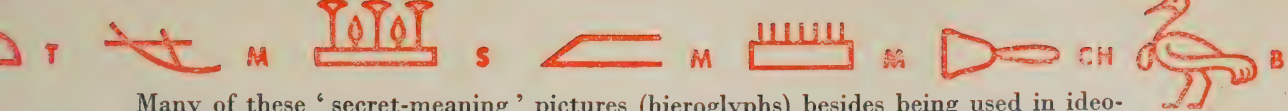
Then, too, he set down his ideas by metaphor—the real or fancied resemblance of the properties of some object; as, the arm for strength, and the eye for judgment; the hand for authority; and because of the bees' faculty for organization, the Egyptian scribe drew it to symbolize King.

*They did not dare to take down the scaffolding which had enabled them to erect the edifice.

Isaac Taylor, THE ALPHABET.

HIERATIC





Many of these 'secret-meaning' pictures (hieroglyphs) besides being used in ideographic and symbolic forms, were given phonetic values and used as alphabetic characters to 'spell out' words. These various forms of writing were used side by side with each other by the Egyptians from a very early time.

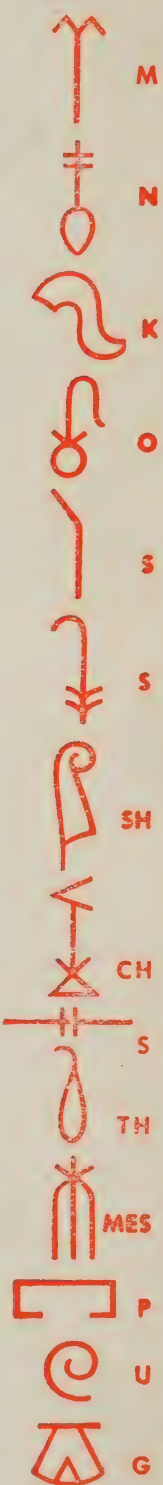
The so-called Egyptian alphabet contained many more characters than does our simple alphabet of twenty-six letters. The Egyptian scribe employed many duplicate signs to give his words a different shade of meaning as we use gender or plural inflections. For example, in the use of the letter L in a name (both the Lion and the Lotus were symbols for the L sound, the Lion being the masculine form) if it were used in a King's name the Lion form was drawn, if in the name of a Queen, the Lotus.

There were, of course, synonyms in the Egyptian language to be used as we use different words of the same meaning to avoid repetition. In the 'alphabet' there were twenty A's and thirty H's, and many duplicates for every letter sound. In all, over six hundred characters. This alphabet was not, as one can see, the same as our alphabet. The hieroglyphic system contained all known methods of writing.* True alphabetic writing represents the final stage of simplification of phonetic sounds and symbols. But the Egyptian hieroglyphs represent the beginning of institutional writing.

The evidence in the hieroglyphs themselves favour the belief that many of our letters have descended from pictures, although today little of pictorial value remains in our letter forms to remind us of their pictorial beginnings.

*So many crutches were thought necessary that walking became an art of the utmost difficulty.

Isaac Taylor, THE ALPHABET.



DEMOTIC



A Egyptian writing may be divided into three classes and periods :

B **HIEROGLYPHIC** — *Old Empire* — about 3400-2475 B.C.

K, G

The secret, priestly writing. Continued to be used until the first century B.C.

It appears on ancient tombs and monuments.

T, D

HIERATIC — *Middle Empire* — about 2160-1733 B.C.

H, E

Hieroglyphics continued to be written in stone, but manuscripts in ink on

F, Y

papyrus show this simplified form. Both were used exclusively by royalty and

Z

the priesthood.

K, X

DEMOTIC — *New Empire* — after 1580 B.C.

TH

Language and writing undergoes further modification in non-religious texts

I

until in the sixth century B.C. this final simplified style emerges in common

K

and commercial use.

L

Alphabetic design originated in the hieroglyphic form by the priesthood doubtless

M

through a desire for secrecy in their writings. Early writing was carefully rendered and

N

the meaning jealously guarded, but as the priests became more allied with the political

S, X

world, the knowledge of writing became more general. Its use in commerce made it

P

widespread. The forms of the symbols changed with use. Simplified characters, easy

Z, S

to read and write became a necessity. When man realized the practicality of selecting

Q

certain symbols constantly to represent the elemental phonetic values in his language he

R

committed to eventual oblivion the many cumbersome systems of writing then in use in

S

the ancient world.

T

Egypt produced no great literature. Most of the writings of this great civilization

are of a religious nature, sacred rites and customs, fables of their many animal-faced

The Alphabet of Hieratic Characters. (After Taylor).

gods, and philosophical reflections. There are, of course, the many inscriptions on the monuments throughout the land telling of the glorification of the kings, their architectural and irrigation triumphs, and their mighty victories over their enemies. Perhaps the most notable survival is the 'Book of the Dead,' a collection of maxims for the guidance of the soul after death. This ancient work is equal in spiritual thought to the later Hebrew Scriptures and had many versions as have the 'books' of the Old Testament.

Many of these scrolls showing fine artistic craftsmanship are to be found in our museums. They are drawn and written on sheets of paper made from the papyrus plant, neatly glued together in long strips. Some of the strips of pages exceed a length of seventy feet. They were written from right to left and were kept in rolls tied with cords. They contain illustrations, often in colour, with the text in black and red.

The Egyptian scribe employed a flat reed for his writing tool, crushed at the tip to the softness of a brush.



*From a Book of the Dead of the 22nd Dynasty.
Characters in Hieratic. British Museum.*

THE ROSETTA STONE

FOR long ages the Egyptian hieroglyphic signs were as a closed book to all men. In Rome, from the time of the Caesars there had stood many Egyptian obelisks brought back by the early conquerors as trophies of war. The hieroglyphs which adorned the obelisks were considered to be mere decoration ; that they were inscriptions was not even guessed at for over eighteen hundred years. The Egyptian ' pictures ' long remained a confusion of ornament and meaningless signs, their significance forgotten.

With the closing year of the eighteenth century an event occurred which was soon to place in the hands of scholars the key to the mystery of the hieroglyphics. The event, the finding of the Rosetta Stone, which was to make possible our knowledge of the ancient Egyptian civilization, was an outcome of the French scientific expedition to Egypt under the first Napoleon.

No historical novel is more romantic than the real story of the opportunity afforded by the finding of the stone, the attempts made by the greatest scholars of Europe, and the final decipherment of the unknown inscriptions. Success in this work was reserved for one who was but nine years of age at the time of the discovery of the stone, which later was to yield to his genius the lost language of its secret writing. The entire world of letters is indebted to the brilliant French scholar, Jean Francois Champollion, who with the assistance of his son disclosed the secrets of the hieroglyphs.

Bonssard, a French artillery officer, in 1799, while digging among some ruins at Fort St. Julian near Rosetta (a few miles from Alexandria), discovered a mutilated chunk of black basalt, covered on its one flat surface with inscriptions rendered in three kinds of writing. It was immediately inferred that the inscriptions on the stone were but different forms of the same text. The upper inscription was engraved in hieroglyphics, the sacred writing of the Egyptian priests ; the second text was in demotic, the writing of the educated Egyptian people ; and the last was in Greek. The stone was presented to the French Institute at Cairo where it did not long remain.

The now famous Rosetta Stone, after the surrender of Alexandria to the British in 1801, was removed to England and placed in the British Museum. A facsimile of the inscriptions was made and copies were soon distributed among the scholars of Europe. The Greek writing was readily interpreted, but the then unknown Egyptian characters remained meaningless. The Greek inscription proved to be a decree by the priests of Memphis in honour of King Ptolemy Epiphanes, B.C. 198 : " that, in acknowledgment of

the many and great benefits bestowed upon them by this king, they had ordered this decree engraved upon a tablet of hard stone in the writing of the priests ; in the writing of the people ; and in the writing of the Greeks, their rulers. Also that the engraved decree be set up in the temples, near the image of the ever living King.” The most distinguished scholars in Europe during the next twenty years tried unsuccessfully to interpret this meaning into the Egyptian characters.

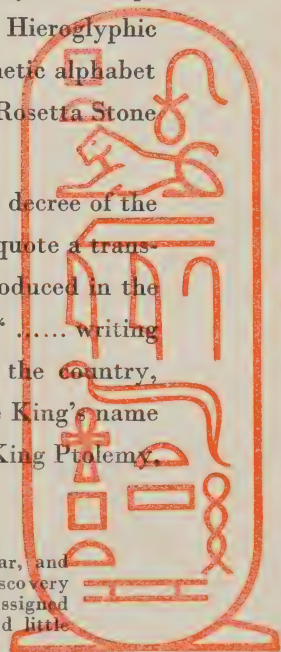
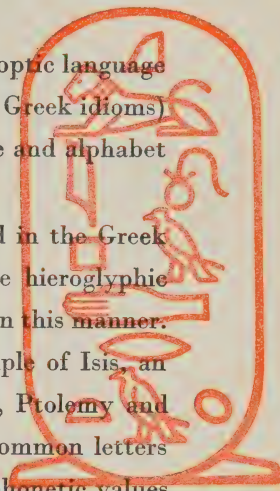
Champollion, aided by his rare scholarship and his knowledge of the Coptic language (a survival of the Egyptian language, although corrupted with Arabic and Greek idioms) succeeded, with only one small clue, in restoring to the world the language and alphabet of the ancient Egyptians.

He noticed and rightly guessed, that the name, Ptolemy, easily read in the Greek writing, was contained in the ovals or cartouches that appeared in the hieroglyphic inscription. We now know that the Egyptians always wrote royal names in this manner. Champollion had previously seen on the island of Philae, before the temple of Isis, an obelisk with similar cartouches and a Greek inscription with the names, Ptolemy and Cleopatra (Ptolmais and Kleopatra). These names determined twelve common letters in the Egyptian alphabet and greatly aided him in his task of attaching phonetic values to other hieroglyphic characters.

In 1822, Champollion announced the results of his studies to the Academy of Inscriptions at Paris, and followed this by the publication of his work on the “ Hieroglyphic System of the Ancient Egyptians,” in which he offered proof that the phonetic alphabet was the key to the whole system. The final work of the translation of the Rosetta Stone was completed by Champollion the younger, in 1841.

To give the reader an idea of the clearness of the words of this ancient decree of the priests of Memphis as they were inscribed over two thousand years ago, I quote a translation of the fourteenth line, part of which, to the word ‘ Greeks ’, is reproduced in the hieroglyphics at the top of page 24 and which reads from right to left, “ writing this upon a tablet of hard stone granite—in writing sacred, writing of the country, writing of the Greeks, that it may be set up in the temples of Egypt in the King’s name of the first, second, third (degrees) where (is) the consecrated image of the King Ptolemy, ever living, beloved of Phtah, god Epiphanes, very gracious.”

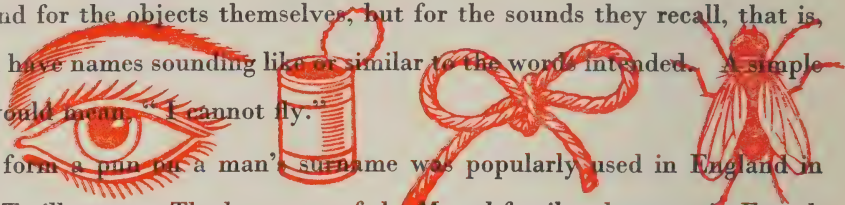
NOTE: It is of record that Dr. Thomas Young, an English scientist and scholar, and Zoega, a Danish archaeologist, each independently, about 1787, had made the discovery that the hieroglyphs in ovals represented royal names. Young, as early as 1818, assigned the proper phonetic values to six of the Egyptian hieroglyphic characters. He had little confidence in his conceptions, however, and went no further with them.





THE REBUS

A CLEAR illustration of the first steps taken by early man in phonetism before alphabetic characters were used may be found in the rebus. In a 'rebus' the pictures of objects do not stand for the objects themselves, but for the sounds they recall, that is, the pictures shown have names sounding like or similar to the words intended. A simple rebus in English would mean, "I cannot fly."



The rebus to form a pun on a man's surname was popularly used in England in heraldic devices. To illustrate: The hammers of the Martel family—hammer in French being 'martel'; an ox crossing a ford in the Arms of Oxford; the wood-stock or tree stump of Thomas, Duke of Gloucester, who was born in Woodstock. Herewith is a rebus bearing a beacon and tun (based on a tun or barrel), used by Thomas Beckington, Bishop of Bath and Wells in 1477. In later times the rebus survived in use on tradesmen's cards and painted signs, as in Robert Legg's at the sign of ye 'leg' in Holborn.*

In the Egyptian hieroglyphics—pictographs, ideographs, syllabic rebuses, and characters for primary sounds are used side by side. The name lapis lazuli in the Egyptian language is khesteb. Also, khesf means 'to stop' and teb means 'pig.' Lapis lazuli was amusingly represented, therefore, in an inscription of Ptolemy XV at Edfu by a picture of a man holding a pig by the tail. From the use of a picture to represent the name of the object alone, it proved a simple step to the use of objects to represent the primary sounds of their names to signify a different 'sound' meaning.

The rebus form as first used was an elementary form of syllabic writing. The rebus stage may therefore be called the first stage of phonetism. An analysis of the primary sounds in his language eventually led the scribe to employ alphabetic signs. (There are about sixteen primary sounds in most languages).

The first alphabetic characters were probably chosen because the initial elementary sound of the name of the pictorial symbol closely corresponded to the alphabetic sound for which the sign was sought. The native names divulge the manner of the selection of many of the characters in the Egyptian alphabet: a, reed—ake; a, arm—aa; b, leg (to

Robert Legg
at the Sign of ye Leg
 32
 HOLBORN

*This quaint use of y for th, in 'ye' for 'the,' is due to a confusion of the letter y with the Anglo-Saxon runic character 'thorn' (þ). 'The' was never pronounced ye.



walk)—bu ; p, shutter—pu ; f, snail—fent ; m, owl—moulack ; n, water—nu ; l, lion—labo ; r, mouth—ro ; z, serpent—zst ; etc. (See pages 26 and 27).

The Egyptian 'alphabet' was constructed much in the manner that children learn theirs—by associating objects with the primitive sounds of their names. Remember the A B C books ? A is for ark, B is for ball, C is for cat, etc. A, also, was an apple pie, and B bit it, and C cut it, etc. ; then, too, Great A, little a, bouncing B, The cat's in the cupboard and she can't see. The Egyptian scribe represented some of the letter sounds in his alphabet with as many as twenty-five different signs. Phonetic writing became true alphabetism when the pictures or symbols of objects became fixed and permanent signs for the sounds in any given language. Continually used and altered, the alphabetic symbols have become a shorthand of the pictures they were in the beginning.

The amusing rebus is still in the kindergarten with the other toys but it becomes, in our estimation, an important device when we consider that from its whimsical scheme we have our alphabet.

CHILD'S PROGRESS

THE child invariably draws pictures before he learns to write, and unconsciously, as he progresses, roughly repeats within a few years' time, the long process of evolution that took place in the development of writing.

At first, his pictures are of simple, familiar objects. Then as he becomes more adept in his medium of expression he pictures ideas and actions. He draws pictures



understandable for all their crudeness clearly to himself even after a period of time. There is usually a story that the child memorizes as the picture is drawn and the story is unvarying in the telling when he is reminded of it by his own pictures. Compare these early efforts with the picture writing of the American Indians. There is a great similarity between the two. Children 'take to' drawing as naturally as did primitive man and as innocently.

Illustrated is a series of connected ideographs drawn by my son Peter at about the age of five. They recall to him the story of Jack and the Beanstalk. They were drawn immediately after the story was read to him.

As the child gradually learns to write phonetically he does not at first discard his picture writing but is apt to set it beside his alphabetic writing in the same manner as did the ancient Egyptians.

The child's progress takes him definitely through the pictographic, ideographic or hieroglyphic stages, and eventually he achieves the phonetic stage when he learns the true principles of alphabetic writing.

Much to be regretted is the fact that the child often discards his drawings completely when he finds that he can express himself freely with the written word alone.

Dear Daddy, Norman is hitting us
and we get blamed for it all. And
he does not get spanked for it.
Will you please write a letter
to Norman and tell him to stop
hitting us. Can you buy me a doll
love Peter.

THE ANCIENT SIGNARY

SINCE the time of the translation of the Rosetta Stone there have been many learned guesses that the letters of our alphabet have developed down a straight path from the Egyptian hieroglyphs, through the Phoenician and Greek alphabets. No theory could be more convenient and in error, or unnatural in fact.

Professor Flinders Petrie, in his many excavations in Egypt and elsewhere among the ruins of ancient cities, discovered and kept a record of a great body of signs used apart from the hieroglyphic system, by his estimate from about 6000 B.C. to about 1200 B.C. or later. These markings were employed as identification marks, owners' seals, manufacturers' marks, etc., on vases, masonry and other properties. Many of the characters were also found on stone chippings in ancient quarries. These signs may be of geometric invention or of some earlier pictographic system but the fact remains that many of them bear a great likeness to many of the linear characters of the later Semitic alphabets. Possibly many pre-historic civilizations contributed these accepted forms. It is not to be imagined that they had phonetic values at first; but the evidence is in the signs themselves that many of them became syllabic and alphabetic characters in later times. As other examples of this signary have been found scattered from Spain to Asia Minor, often in Neolithic strata we may assume that it was in use around the Mediterranean area for several thousand years before the appearance of the Semitic alphabets or the rise of Phoenician influence.

In early times when ships from Sidon and Tyre and the Aegean islands weighed anchor in the Nile, no doubt the cargoes in their holds bore the scribes' markings in these linear characters. As the first great pyramid was built perhaps the mighty Pharaoh's engineers and mathematicians noted their plans and marked the stones at the quarries with this signary.

It is possible that at a later time Joseph, as minister of agriculture, was acquainted with the use of these characters as a commercial shorthand while he directed Egypt's grain conservation, and that his scribes kept "books" of the store at the granaries. We know that from the very beginning of the use of alphabetic characters they carried numerical values.

Western Semites, about 1600 B.C., developed an alphabetic script that surely is the forerunner of the Phoenician alphabet. Most of the characters were pictographic in form and coincide with the names of the letters of the Phoenician alphabet. Each symbol carried the unvarying value of a consonant. No signs for syllables were employed and vowels were unwritten.

Seirite-Sinaitic Alphabet.

Colonies of Semites were in close contact with Egypt and the hieroglyphic forms of writing from an early time. It is logical to suppose that in developing their own script they adopted some Egyptian signs that possessed in name the phonetic values closely equivalent to the sounds in their own language for which they sought signs. Not bound by the religion and customs of Egypt they discarded the many unnecessary devices so long employed in the hieroglyphs and retained only the plan of true alphabetic writing.

The Phoenician alphabet seems to me to represent the perfect halfway point in any story of our alphabet. We have at this stage names for the letters that are descriptive of the simplified writing characters. The Semitic names: Aleph—Ox, or more fully, one of a herd of domestic animals; Beth—House; Gimel—Camel, etc., give us clues of the pictographic origins of the symbols.

The characters of the first Semitic alphabets may have been adopted equally from the hieroglyphs or the widely used linear signs of the ancient signary. In the early days of alphabetism the signs that stuck in a developing system were the ones that were popularly recognized and remembered. Thus the survival of symbols of such universally known objects as the Ox (or plough), the Hand, the Eye, the House, Water, the Fish, and the Post (or tree). The Camel (or angle) sign seems to have been of local invention, as does the Shepherd's Hook sign.

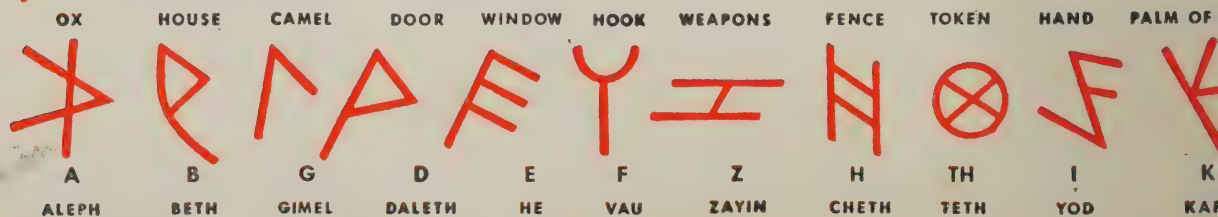
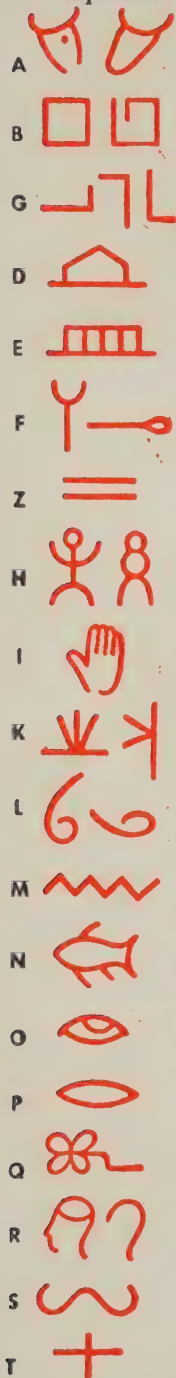
In the margin to the left is the Seirite alphabet* used about 1600 B.C. in the vicinity of Sinai, and beneath, the Tyrian alphabet from the Moabite stone of the ninth century B.C. It will be noticed that seventeen of the signs have carried through from one alphabet to the other with little change.

Examining the hundreds of signs of the syllabaries used in Crete, Cyprus and Mesopotamia, the signs of the Mediterranean signary, the Egyptian hieroglyphs and their cursive variants, one must conclude that within a few centuries after 2000 B.C. the Semitic alphabets were influenced in their development by many earlier systems; and that sometime later and even overlapping this period the Greek and Etruscan letters were developed along similar lines.

The letters of the many alphabets were never passed from one people to another unchanged. Each locality had its own signs for certain sounds. The older signs merged with whatever innovation was introduced. The history of our alphabet is as old and diverse as civilization.

As the Roman alphabet is adopted in greater areas of the earth's surface, perhaps the Eastern peoples will contribute to and change the forms of many of the letters so that in time they will greatly differ from the forms we use today, while others will be sensibly discarded. Surely now we could discard the letters Q, X, Z and K. They are as useless to us in our everyday needs as they were to the Romans.

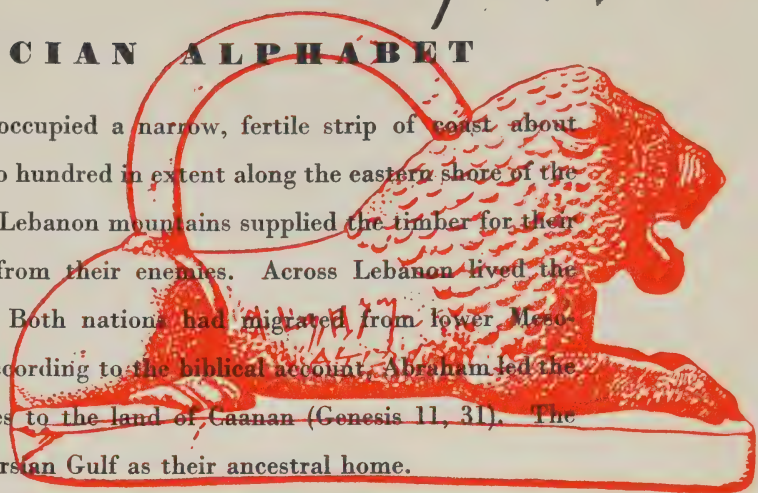
*After Professor Martin Sprengling, STORY OF WRITING.



9 L 7 H 7 7

THE PHOENICIAN ALPHABET

THE Phoenicians, a Semitic people, occupied a narrow, fertile strip of coast about thirty-five miles in width and about two hundred in extent along the eastern shore of the Mediterranean Sea. Behind them the Lebanon mountains supplied the timber for their ships and formed a natural defence from their enemies. Across Lebanon lived the Israelites, racially allied with them. Both nations had migrated from lower Mesopotamia sometime about 2200 B.C. According to the biblical account, Abraham led the Hebrew race out of Ur of the Chaldees to the land of Canaan (Genesis 11, 31). The Phoenicians themselves claimed the Persian Gulf as their ancestral home.



The position of Phoenicia at the crossroads of eastern and western trade, favourable for commerce, combined with the maritime activities of these early traders, caused them to hold an important place in the ancient world. From earliest times their ships, putting forth from their natural harbours, carried rich cargoes to all parts of the civilized world. Trade brought the early civilizations into contact with each other, aiding the spread of knowledge and culture.

M(A)N(E)H
M(E)L(E)K
"A maneh
of the king."

A practical people, whose sole object was material gain, the Phoenicians commercialized art as they did all else. The principal characteristic of their art was its free borrowing from the art of surrounding nations. They had small store of originality but a great aptitude in craftsmanship and in combining foreign art motifs. From their older, more cultured neighbours they borrowed the motifs from which they fashioned their alphabet. The Semites eliminated many of the syllabic characters and signs that were then in use and simplified the chosen number for their own commercial purposes.

Glassware, dyestuffs, pottery and metal work were the principal exports of Phoenician industry. In jewellery, wood, stone and metal engraving they proved efficient imitators. Hiram I, king of the leading Phoenician city, Tyre, about 950 B.C. supplied his neighbour, king Solomon of Judæa, with craftsmen and materials for the building of his palace and temple. In a passage of Kings V, one may read of this transaction. Also in II Chronicles 2, 14, we read: "the son of a woman of the daughters of Dan, and his

X GOAD	WATERS	FISH	POST	EYE	MOUTH	JAVELIN	KNOT	HEAD	TEETH	MARK
L	M	N	S	O	P	TS	Q	R	SH	T
LAMED	MEM	NUN	SAMEKH	'AYIN	PE	TSADE	Q'OPH	RESH	SHIN	TAU

father was a man of Tyre, skilful to work in gold, and in silver, in brass, in iron, in stone, and in timber, in purple, in blue, and in fine linen, and in crimson ; also to grave any manner of graving."

In this land were founded nine cities of which Byblos* was the most ancient and Sidon and Tyre in turn the most important. The cities were each ruled by its own king. In time of danger they united under the leadership of the most powerful.

The principal cities such as Tyre and Sidon founded trading posts and colonies along all the Aegean and Mediterranean seaboard, as far west as the Atlantic coast of Spain. Extensive mining operations were pursued wherever metals could be found. Phoenician ships reached the shores of the British Isles in search of tin.

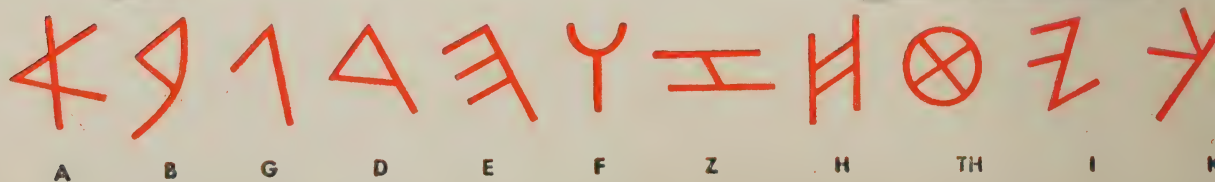
The first mention of the Phoenician cities is found in the Egyptian records of the towns captured by Thotmes III about 1600 B.C. For a thousand years thereafter, of the many nations that rose to might and then disappeared from the face of the earth, this small nation flourished, plied its trade, paid its tribute to one greater nation or another and maintained its national monarchies. Her merchants moulded together in practical use their alphabet and spread the use of it to all countries with which they came in contact.

* The chief export of this city was Egyptian grown 'papyrus' from which came 'paper.'

'Bible' is derived from the Greek 'biblos' (collection of books).

The two small Semitic nations, the Phoenicians and the Israelites, have had a more profound influence on western civilization than all the civilizations that preceded them. The first has given the basic forms for the written languages of all the nations of Europe and central Asia ; while the latter through the ' books ' of their Scriptures formed the basis of all religions in Europe.

There were two distinct types of the Phoenician alphabet ; the Moabite or Tyrian ; and the Sidonian. The first dates from about the ninth century B.C. It developed in Tyre and was used during the rise of that city's influence. The Greek alphabets grew



93.9 + y y (y g (y w y y . y . o w y . y y +
 y (y y y + y . x w y w (w . g + y (o . y (y z y + , z y z
 1 z y + 9 H + . z x

from this type. Early traders introduced it into Greece shortly after the Trojan war. It was later used by the inland tribes in Moab and Syria and also by the Jews down to the time of the Captivity.

The other type, the Sidonian, dates from the sixth century B.C. It was used at Sidon and the principal cities in Phoenicia and at Carthage in Africa immediately after the conquest of Phoenicia by Nebuchadrezzar. The two varieties were used side by side in different sections of Phoenicia for centuries. The earlier traders used the Moabite form and the Israelites and Judæans both continued to use it, but the Phoenicians themselves, after the destruction of Tyre by Nebuchadrezzar, used the Sidonian form.

The famous Moabite stone, found in 1868 on the site of Dibon, the ancient capital of Moab, and now in the Louvre at Paris, is the oldest Phoenician inscription to which a definite date can be assigned. It is the inscription of Mesha, king of Moab, and gives his version of his rebellion against Jeroham, king of Israel, to whom he had long paid a crushing tribute.

In the Bible we read that the Israelites "rose up and smote the Moabites, so that they fled before them ; but they went forward smiting the Moabites, even in their own country, and they beat down the cities, and on every good piece of land cast every man his stone and filled it ; and they stopped all the wells of water, and felled all the good trees ; only in Kir-haresth left they the stones thereof ; howbeit the slingers went about it and smote it." (II Kings 3).

Mesha, secure in the fortress of Harosheth, near Arnon, while the slingers of Israel went about it and smote it, lived to erect this monument of victory on which nearly three thousand years later we read : " he took the.....of Yahweh and dragged them before Kemosh " and " he took Yahas and added it to Daibon." The information follows that

J W N F O C Y P P W X
 L M N S O P TS Q R SH T

he rebuilt the citadel and royal palaces and the destroyed cities of Moab. This stone is dated by the fact that Jehoram reigned from 896 to 884 B.C. The accounts of these kings leave us no doubt that they were both victorious.

A redrawing of the first two lines and part of the third of the inscription on the Moabite Stone is shown on page 39. Below are the equivalents in our Roman letters, with vowels, which were almost wholly omitted in Phoenician inscriptions, in brackets. The original is inscribed from right to left :*

1. 'AN(O)K(I). M(E)Sh'(A). B(E)N. K(A)M(O)ShM(A)LD. M(E)L(E)K.
M(O) 'AB. HED—
 2. IB(O)NI | 'ABI. M(A)L(A)K. 'AL. M(O) 'AB. ShL(I)Sh(I)N. Sh(A)T.
V'AN(O)K(I). M(A)L(A)K—
 3. TI. 'ACH(A)R. 'ABI |
1. I am Mesha, son of Kamoshkold, king of Moab, the D-
 2. ibonite. My father reigned over Moab thirty years, and I reign-
 3. ed after my father.

This is true alphabetic writing in the final stage, a perfected alphabet in form, order and letter names nearly identical with our alphabet of today.

Another inscription in the early Tyrian style and the oldest as yet discovered (page 38) is engraved on eight small fragments of a bronze bowl found on the island of Cyprus. The bowl was given by a citizen of Carthage (New town, in Phoenicia—not the later Tyrian colony in Africa) and doubtless deposited in the temple of Baal, Lebanon, from which it was probably pillaged and carried to Cyprus. If the Hiram mentioned in the inscription is the Hiram of King Solomon's time, the inscription may date from the beginning of the tenth century B.C. The Tyrian alphabet was in use from the tenth to

*Oriental languages are inscribed to this day from right to left.

In transmission through the Greek the forms of the Phoenician letters were reversed as the writing was changed to read left to right. Early Greeks attempted to establish their writing in a continuous line, that is, left to right through one line, then reversing the characters on the next line to read back right to left, and etc. This form of writing is called 'boustrophedon,' meaning, 'as the ox ploughs.'

Beneath, the Phoenician letters are reversed for comparison with the letters of our own alphabet.

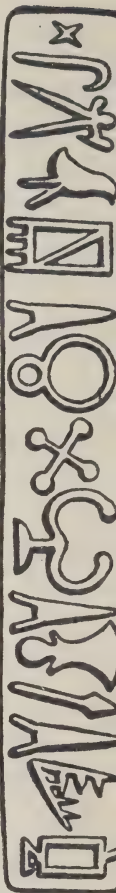
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the seventh centuries B.C. Translated to English, the inscription on the six joined fragments reads : “.....a citizen of Newtown, servant of Hiram, king of the Sidonians, give this to Baal Lebanon his Lord, of good brass.” Beneath are likenesses of parts of inscriptions in the Sidonian style. The first is from the great sarcophagus of King Tabnith, who ruled in Sidon in the latter part of the fourth century B.C. The sarcophagus now rests in the Museum of Constantinople. The inscription reads : “ I, Tabnith, priest of Ashtart, king of the Sidonians, son of Eshmun-azar, priest of Ashtart, king of the Sidonians, lie in this coffin.”

Across the page is part of the inscription from the sarcophagus of Eshmunazar II, king of Sidon, found in 1855 in the necropolis of ancient Sidon and now in the Louvre. It reads : “ In the month of Bul, in the fourteenth year of the reign of King Eshmunazar, king of the Sidonians,.....” There are several lines following in each inscription, filled with pleas and threats to robbers or others who would seek riches or otherwise desecrate the tombs.

Before the Dorian invasion in the twelfth century B.C. scattered its population over the Aegean islands and the mainland, the island of Crete was the centre of a very early civilization, in which the art of writing, purely native in its primitive state, was known centuries before its appearance on the mainland. This Mycenaean culture has been traced over a period of twelve hundred years, beginning about 2500 B.C.

Professor Arthur J. Evans has discovered many engraved gems and seals in carnelian, jasper, steatite and other stones among the ruins of ancient cities in Crete. Egyptian scarabs of the twelfth and thirteenth Egyptian dynasties found in the lowest strata of deposits date the seal-stones from about 2500 B.C. The most archaic inscriptions on the seal-stones are pictographic, while the later types have the appearance of being a phonetic syllabary. A number of recurring elements, about seventy in number, points to the common use and origin of conventional signs or symbols. Down the margins of these pages are shown two sides of a four-sided seal engraved in carnelian. Each face bears an undeciphered inscription. In the symbols are pictographic characters among others that have a great similarity to alphabetic characters.



SEAL Stone
after Evans.
'Scripta
Minoa.'

Handwritten red symbols and characters, possibly a transcription or interpretation of the seal's inscription, including various stylized letters and numbers.

Professor Evans in his "Cretan Pictographs and Pre-Phoenician Script" has analysed over a hundred of the Cretan symbols and shows the connection of many of them with the Phoenician alphabet.

Professor William Flinders Petrie in his "Formation of the Alphabet" presents charts in which he shows in parallel the several hundreds of signs in the Mediterranean signary which he classifies as from Egypt, Crete, Cyprus, Caria, Lydia, Lycia, Spain and other countries. Professor Petrie estimates by the known dates in history that this signary was in use around the Mediterranean as early as 5000 B.C. The ancient Greek historians were reasonable in supposing "that the Phoenicians only changed the type of the letters, and made the knowledge of them more general among the peoples."

The earlier pictographic elements out of which the Phoenician letters were evolved were employed in the Aegean islands, Egypt and elsewhere in the Mediterranean lands and reduced to linear signs similar to the Phoenician letters at a very remote age. Some of the Semitic names of the symbols lead us back to their pictorial originals: Aleph—ox, Beth—house, Gimel—camel, Zayin—weapons, Cheth—fence, Samekh—post, 'Ayin—eye, etc. (See pages 36 and 37 for comparison of the Phoenician letters and the Seirite-Sinaitic alphabet employed by the western Semites near Egypt about 1600 B.C.) The Phoenicians, assisted by the Egyptian forms of writing, simplified this linear system to which we owe our alphabet. The linear signs became as removed from their pictographic originals as is our handwriting from the type in which this page is printed.

The discoveries of Professor Petrie and Professor Evans supply a new chapter in the story of the alphabet as they prove the forms of the Phoenician letters were known before the rise of Phoenician influence. In "Royal Tombs of the First Dynasty" (1912) Professor Petrie states: "What is really due to the Phoenicians seems to have been the selection of a short series (only half the amount of the surviving alphabets) for numerical purposes, as A—1, E—5, P—100, 0—500, etc. This usage would soon render these signs as invariable in order as our numbers, and force the use of them on all countries with which the Phoenicians traded. This exactly explains the phenomena of the Greek alphabets; many in variety, and so diverse that each has to be learned separately, and yet entirely uniform in order."

ض ط ظ ع غ ف ق ك ل م ن ه و ي

Y W H N M L K Q P GH 6 Z T D

ARAMEAN VARIATIONS

THE alphabet of ancient Israel was similar in form to the Phoenician alphabets. But during the Captivity modifications known as the Aramean were used by the Jews and their captors in Assyria and Babylonia and also throughout the northern countries. The Aramean was used in Nineveh and Babylon as well as the ancient cuneiform. The cumbersome cuneiform syllabaries, native to Mesopotamia and in use for almost four thousand years, eventually gave way to this new flexible alphabet of the west as it was introduced by the Phoenician traders.

The Aramean alphabet first appeared in the highlands of Aram on the caravan routes from Egypt and Phoenicia to Mesopotamia about the seventh century B.C. Its rise began with the decline of Phoenicia following the sack and destruction of Tyre by Nebuchadrezzar, the Chaldean ruler, and the resulting rise to importance of the highland races of Aram and Syria.

This Aramean corruption of the Phoenician alphabet was brought by the Jews to their own land from the cities when they returned from their long period of captivity.

The Jews in Palestine probably used the Aramean alphabet until the second century B.C., when the southern Aramean began to be transformed into the Square Hebrew alphabet. The modern Hebrew of today was not fully developed into its present form until the tenth century A.D.

In the north the Aramean alphabet, after passing through a thousand years of local modifications, developed into the modern Arabic alphabet. These cursive forms springing from the same sources as our own, have been reduced to extreme legibility and simplicity while they retain the virtue of great decorative beauty. This letter, like the Egyptian hieratic, shows the great influence the writing or carving tool has effected in the formation of the characters.

All early systems of writing show a tendency toward alphabetism, but they all did not reach an alphabetic stage. Some reached only a phonetic state where they were destined to remain. The Semitic characters formed the first true alphabet, not the first use of letters or alphabetic characters, but that stage in the evolution of symbols where they were used to express a language completely.

Over two hundred thousand English words may be expressed with the twenty-six letters of our English alphabet. As an example in comparisons, consider the Chinese form of writing, which until recently has not been developed beyond the ideographic stage. Employing a separate character for each object or action, the Chinese writer must know from six to seven thousands of his groups of characters to express the forty or fifty thousand words in his vocabulary. The American Indian, isolated from all forms of culture and invention that developed in the Eastern Hemisphere, did not evolve his method of writing beyond the pictographic system.

In the margin of the opposite page is the Moabite alphabet of the ninth century B.C. On this page is shown the Sidonian alphabet of the sixth century B.C.

Beside it is the Samaritan alphabet, a pure form of the Aramean, dating from the sixth century A.D. Below is shown the modern Arabic alphabet.

ا ب ت ث ج ح خ د ذ ر ز س ش ص

§ SH S Z R DH D KH H J.G TH T B A

Modern Arabic

4 9 ^ A 3 4 2 H C 2 4 5 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

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WE must turn back at this point to consider the cuneiform system of writing, practised in Mesopotamia from a time as remote, if not preceding that of the origin of writing in Egypt.

Cuneiform writing was invented by the Sumerians and Accadians, the first peoples known to have occupied the plains between the Tigris and the Euphrates Rivers (which in ancient times emptied independently into the Persian Gulf some thirty miles apart). From these primitive peoples cuneiform writing was transmitted to the Semitic Babylonians and Assyrians, their conquerors.

Of the original homes of the Sumerians, from which they came to the once fertile plains of Mesopotamia, one cannot speak with confidence. But this we know, that civilization flourished along the ancient Tigris and Euphrates Rivers in the fourth millennium B.C.

The Sumerians themselves considered their civilization of great antiquity and placed the invention of writing at the beginning of it. Writing developed in Sumer and Akkad along independent lines from those practised in Egypt. The process was similar but the methods differed.

The primitive writing was exceedingly simple, being mainly pictographic, but as the forms developed into a phonetic system of writing, passing as well into a different language, a great combination of pictography, ideography, and syllabary resulted, which contained about six hundred signs in all. This form of writing is comparable in clumsiness and whimsicality with the Egyptian hieroglyphic system.

The name of this writing is derived from the latin (gen) cunei of cuneus, "wedge" and form. Cuneiform writing, as the name implies, is made up of combinations of a single wedge-shaped cut or mark made by a stylus in soft clay.

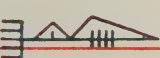
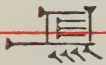
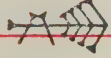
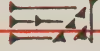
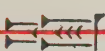
The wedges were formed with the edge of the writing stylus in these few ways; horizontal (), perpendicular (), and oblique ( or ), also a triangular shape made with the tip of the stylus (). From these primary signs, a large variety of combinations are possible, either in single characters or in groups.

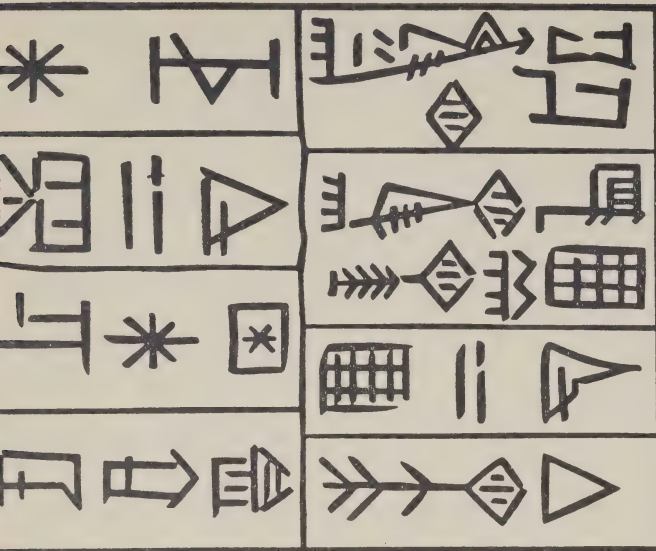
The history of cuneiform writing illustrates the successive stages through which writing tends to pass: the primitive pictograms group into ideograms, these in turn develop into a phonetic system with simplified syllabic signs, until with one step more the alphabetic stage is at hand. The most primitive examples of the cuneiform as practised by the early Sumerians and Accadians have been found on bricks from the ruins of ancient cities in lower Mesopotamia. This writing, called linear Babylonian, consists of pictographs clearly indicating the outlines of the objects represented. The bricks or tablets in which the writing was inscribed or impressed by seals, were made of unbaked clay, so abundantly obtained from the banks of the Two Rivers, which since primeval times have 'made' the land with silt carried down from the mountains to the north.*

At a very early time the picture writing came to be replaced as a matter of graphic convenience, by wedge-shaped strokes, the forms most easily made by a stylus in the wet

* The site of the ancient city of Ur, one time home of Abraham, originally founded near the mouth of the Euphrates, was discovered by archeologists in the last century about ninety miles inland from the sea.

One of "The Monuments Blau," British Museum.

SUMERIAN	EARLY BABYLONIAN	LATE BABYLONIAN	ASSYRIAN		
				STAR	<i>Stages of development from early linear forms. (After Taylor).</i>
				SUN	
				MONTH	
				MAN	
				KING	
				SON	
				PRINCE	
				LORD	
				HIS	
				REED	
				POWER	
				MOUTH	
				OX	
				BIRD	
				DESTINY	
				FISH	
				GARDENER	
				HABITATION	



Archaic linear Accadian inscription of Uruk, King of Hur.



Later copy in Early Babylonian cuneiform characters.

The interesting comparison shown in the two inscriptions above, between the archaic linear Babylonian and the later cuneiform is possible through the unusual discovery by Henry Rawlinson of two curious tablets among the ruins of Warika, the ancient Huruk or Ereck. The cuneiform inscription on the right is undoubtedly a copy in these characters of the other, earlier pictographic inscription on the left.

clay tablet.....the signs, too, could be made quickly rendered when the clay tablet was held in the hand. The stylus impressing only straight lines in the cake performed more rapidly when it was pushed in and drawn out from left to right. Curved lines were naturally abandoned and the "little pictures" were drawn as simply as possible in straight lines. In writing across the tablet it followed naturally that the characters in time were drawn in a horizontal position, appearing upright in their registers only when viewed from the right.

Eventually the wedge groupings bore no resemblance whatsoever to the pictures they were in the beginning.

To show the development of the signs let us take for example, the primitive sign for Alpu, (OX), , doubtless the source-sign of our letter A. As the sign was turned on its side and drawn in straight lines, it became , rendered with wedges, it appeared . In time it became abstract, to this extent , and after a thousand years of simplification it was reduced to a true alphabetic character with the value of A. .

Pictographic in the beginning, this system of writing developed through an ideographic stage, the characters in time assuming completely abstract renderings. Phonetic values became closely associated with the signs until the "pictures" stood primarily for syllabic values. The signs were grouped in writing to compose by syllables the spoken words instead of attempting to record the idea by pictures alone. Other surfaces besides clay, in the beginning were possibly commonly employed to write upon, but few relics of perishable materials have survived.

In the archaic inscriptions, the city of Babylon was represented by a conventional linear picture of a flat country of canals and reeds, . The city of Nineveh* was represented by a simple draft of a house with a fish in it, a curious fragment of history showing us that imperial Nineveh was in the beginning a collection of fishermen's huts, and that Babylon, that great metropolis of merchants, was in its early days an agricultural community.

Mesopotamia, "The land between the Rivers," is a tract of land extending about seven hundred miles from its northern boundaries near the mountains of Armenia, to the southern limit, the Persian Gulf. A range of hills divides this region near the centre, running east and west, from the Euphrates to the Tigris Rivers. North of these hills is the ancient Assyria, with its capital, Nineveh, situated on the Tigris. South of these hills to the Persian Gulf is the ancient Babylonia or Chaldea, where on the Euphrates, its capital Babylon was situated. In the ancient records Assyria is referred to as Akkad, and Babylonia as Sumer ; later as Chaldea.

The monotony of the level plains in this region is unbroken except for the vegetation of the sections bordering the rivers and the long lines of elevated embankments marking the course of the ancient or modern canals, and most interesting to us, the solitary, desolate mounds rising here and there abruptly, many to a height of nearly a hundred feet. These are the artificial city-mounds or tells, upon which from the most remote times the inhabitants of Mesopotamia have built their homes, their cities and their temples.

The river peoples made their buildings of bricks of unbaked clay. As the clay bricks in time washed out in the rainy season, walls and houses collapsed or became unsafe, they merely threw the rubble into the streets and built new houses. Over a period of time the level of the city itself grew in height. It is by digging down through the different levels of these city-mounds that modern excavators have been able to reconstruct by their finds the histories and customs of the ancient Sumerians and Accadians.

In later times sun-dried bricks proved to be more durable and these were used as facings or retaining bricks. Kings, proud of their irrigational or building projects had the stories of their triumphs inscribed or moulded into the bricks before baking. In modern times thousands of these bricks washed out by the seasonal rains of centuries onto the plains, found their way to the museums of Europe. That the wedge-shaped patterns found upon them were inscriptions was for long centuries unsuspected.

So well have the sun-dried and oven baked bricks withstood the ravages of time that some of the mounds, notably those of the late Babylonian period, are veritable quarries of building brick. It has been stated that the bricks of which the palaces and temples of Babylon were built, have for the past two thousand years supplied cities of the surrounding region with the material used in the construction of public and private edifices.

Each city's temple had its library and school for the young. Tablets of laws, histories, astronomical observations, and translations of the old signs into the newer ones were prepared, baked and shelved. Baked clay is possibly the most indestructible material known. Found in clusters in the earth after centuries of repose, these ancient

*The first syllable is identical with Nun (fish), the letter N in the Phoenician alphabet.

writing tablets were long considered so many building bricks. Imagine the surprise of "past" excavators if they could now be told that some of their "nests of bricks" were not just brick yards but "libraries" in which a few thousand years ago books were baked, classified and stored.

The evidence in the inscriptions originally impressed in the bricks and tablets, with the names of the Kings or rulers ("Each his own ancestral Totem, Each the symbol of his household".....) under whose orders they had been prepared, furnish indications of their time and place in history.

Sir Henry Rawlinson, an English military officer in the service of the East India Company, while on duty in Persia undertook a study of the Persian cuneiform characters (a late vestige of an ancient system), and wrested from the trilingual inscription on the rock at Behistun, the key to all the cuneiform systems of writing (1835-1847).

The famous inscription of Darius, son of Hystapes, engraved high upon a sheer wall of rock in western Persia that rises seventeen hundred feet above the plain, had for centuries confounded all men who came to behold it in wonder.

Setting forth the hereditary kingly right of Darius to the throne of Persia and the glories of his reign, the scribes hewed in the living rock a thousand lines in three columns and in three languages, in cuneiform characters, "I am Darieiros, the great King, the king of kings, the king of Persia, the king of nations....."

The Behistun monument inscribed between 521 and 485 B.C. shows in a concise manner the three principal stages in the development of cuneiform writing. Working backward, that is, deciphering the Persian version, which was written in an almost completely alphabetic system of thirty-six signs and only four ideograms, a translation was thus possible of the second and earlier form, a Proto-Medic or Turanian tongue written in a syllabary of ninety-six pure syllabic signs, with a survival of seven ideograms from—the third and earliest, the Semitic version—which contains some 500 symbols—ideograms, phonograms, and homophones.

All knowledge of the system of cuneiform writing was for ages lost in the desert sands of Mesopotamia. The last man who wrote by this method, by documentary record, died shortly after 7 B.C. for the last known record written in cuneiform characters bears this date. This cumbersome, ancient system of writing, over three thousand years in use and development lost popularity in the changing world after the introduction of the alphabetic systems by the western traders.

For ordinary business purposes, cuneiform passed out of use with the final destruction of Babylon. Isaiah's terrible prophecy had come to pass, "And Babylon, the Glory of Kingdoms, the beauty of the Chaldee's excellency, shall be as when God overthrew Sodom and Gomorrah. It shall never be inhabited, neither shall it be dwelt in from generation to generation....." For over a thousand years alphabetic writing had been in use in the newer cities of the ancient world and with the overthrow of the old order of things the most efficient method of writing gained wider acceptance.

In the North Syrian State of the Alaouites, opposite the eastern extremity of Cyprus, a French archeological expedition under the leadership of C. Virolleaud, a cuneiform expert and the chief of the Government Bureau of Antiquities in Beyrouth, recently made a most remarkable discovery.

Two Assyrian scribes recording plunder from a captured city. One writes with a stylus on a tablet, while the other is employing papyrus, pen and ink. A study in overlapping methods from a rock carving of the eighth century B.C.

The characters shown on page 45 trace the successive development of a number of the early 'little pictures' through about three thousand years of change. While many of the signs become syllabic and abstract in their renderings, some were carried over into the newer systems little changed to serve as ideograms, as we employ symbols such as \$ for 'dollars;' % for 'per cent;' and abbreviations as e.g. for 'for instance', and R.S.V.P. for 'respond if you please'. Imagine the complexity of our writing if in it for ordinary use we employed all our topographical, chemical and other shorthand notations.

In ancient times the harbour of Minet-el-Beida (known to the natives today as Ras-Shamra) was an important trade centre between Crete, Cyprus, Egypt and other Mediterranean sea powers, Mesopotamia and the East.

The ruins of a tomb on the site of this ancient harbour city were discovered by a native Alaouite in 1928, which led within a few years to the discovery and excavation of the city itself and the temples and tombs of its kings.* Many clay tablets recovered from the debris of a temple library yielded to translation, being inscribed in the familiar Tyrian Phoenician characters of the Moabite Stone. But others, inscribed in cuneiform made no sense whatsoever when the usual methods of decipherment were applied to them. Noticing that many of these tablets commenced with the same sign, and pre-supposing that the sign was alphabetic, and stood for 'l', the Canaanite equivalent for 'the,' M. Virolleaud proceeded with an alphabetic decipherment. He further noticed the recurrence of a certain combination of three signs. The second sign in this combination being the same as the character with which the inscriptions commenced, he readily assumed that the other two stood for the consonants M and K to complete the word M(E)L(E)K—King. With this key of three letters he was able to decode and translate the remainder of the tablets, which yielded a great body of literature hitherto not known or suspected.

The cuneiform alphabet of the ancient peoples of the once thriving seaport of Minet-el-Beida, as supplied by the scholarly genius of C. Virolleaud, and their Phoenician counterparts are redrawn from his charts.† The date in history assigned to this cuneiform 'Alphabet' predates the Moabite Stone by at least a thousand years and throws another and newer light on the fascinating and diverse history of our alphabet.

*SEE—"A New Alphabet of the Ancients is Unearthed," by F. A. Schaeffer, The National Geographic Magazine, October, 1930.

†Un Alphabet Cunéiforme Du Temps De Ramsès, Arts et Métiers Graphiques, Paris, Jan., 1932.

𐤀	A, E	𐤁, 𐤂, 𐤃
𐤄	B	𐤅, 𐤆, 𐤇
𐤈	G	𐤉, 𐤊, 𐤋
𐤌	D	𐤍, 𐤎, 𐤏
𐤐	H	𐤑, 𐤒, 𐤓
𐤔	W	𐤕, 𐤖, 𐤗
𐤘	Z	𐤙, 𐤚, 𐤛
𐤜	CH	𐤝, 𐤞, 𐤟
𐤠	TH	𐤡, 𐤢, 𐤣
𐤤	I	𐤥, 𐤦, 𐤧
𐤨	K	𐤩, 𐤪, 𐤫
𐤬	L	𐤭, 𐤮, 𐤯
𐤱	M	𐤲, 𐤳, 𐤴
𐤶	N	𐤷, 𐤸, 𐤹
𐤺	S	𐤻 OR 𐤼, 𐤽
𐤾	'A	𐤿, 𐆀
𐆁	P	𐆂, 𐆃, 𐆄
𐆅	TS	𐆆, 𐆇, 𐆈
𐆉	Q	𐆊, 𐆋, 𐆌
𐆍	R	𐆎, 𐆏, 𐆐
𐆑	SH	𐆒, 𐆓 OR 𐆔, 𐆕
𐆖	T	𐆗, 𐆘, 𐆙

ΕΓΡΑΦΕΔΑΜΕΑΡΤΟΝΑΜΟΙΒΗΟΚΑΙΠΕΛΕΞΟΣΟΛΔΑΜ

THE GREEK ALPHABETS



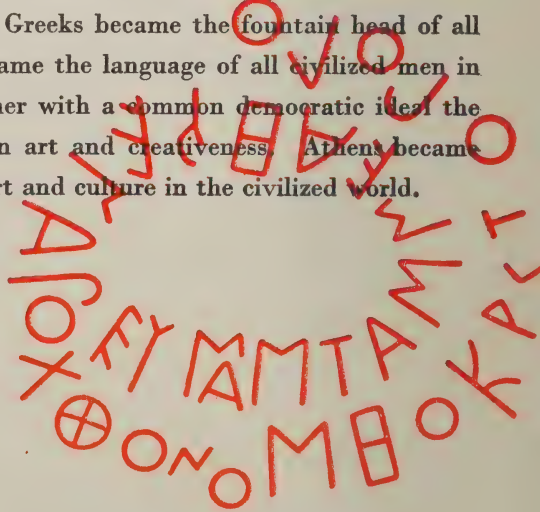
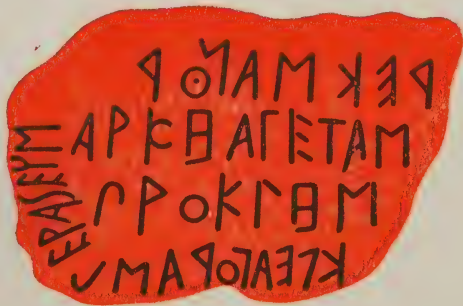
As civilization and culture were carried westward by the maritime routes from the eastern Mediterranean cities, Phoenician navigators introduced their simple alphabet. They not only traded at ports in the Aegean islands but had established colonies there as early as the thirteenth century B.C. and shortly after on the shores of Greece proper. The first colonists settled in Thera and Boeotia ; later colonies were founded at Corinth, Thasos, Melos and other places along the Greek shores.

In the most ancient cemeteries of Thera have been found inscriptions in the most archaic Greek forms, more Phoenician in character than Greek ; but they are the letter forms used by a native Greek people that developed into the classic Greek alphabet and formed the basis of the later Graeco-Latin alphabet. The Greeks themselves in their language called their letters " Phoenician Letters."

Geographic position was a determining factor in the life and art of Greece. It is a mountainous country, broken up by gulfs and bays making it half land and half sea. The poor soil forced the population to the sea to trade, where they came into close contact with the customs of the East and neighbouring states.

Greece took ideas and discipline from both Egypt and Asia. Combining the best of foreign cultures with her own native Aegean-Minoan genius, Greece produced forms of social government, literature, architecture, art and sculpture that may be said to be the acme of creative perfection. The genius of her craftsmen was also expressed in the minor arts, such as glassware, pottery, coins and engraved gems. The ability of the Greeks to transpose their ideals of grace into material form developed in the pre-history of their civilization. In erecting their temples the artist-craftsmen endeavoured to make them desirable as the dwelling places of their gods.

The original and vital literature of the Greeks became the fountain head of all Western thought and the Greek tongue became the language of all civilized men in Europe and the Near East. Banded together with a common democratic ideal the organized city-states attained a golden age in art and creativeness. Athens became the leading city and the Hellenic centre of art and culture in the civilized world.



- Α ΑΑΑ
- Β ΒΒ
- Γ ΓΓ
- Δ ΔΔ
- Ε ΕΕΕΕ
- Ζ ΖΖΖΖ
- Η ΗΗΗΗ
- Θ ΘΘΘ
- Ι ΙΙΙΙ
- Κ ΚΚΚ
- Λ ΛΛΛ
- Μ ΜΜΜ
- Ν ΝΝΝ
- Ξ ΞΞΞ
- Ο ΟΟΟ
- Π ΠΠΠ
- Ρ ΡΡΡ
- Σ ΣΣΣ
- Τ ΤΤΤΤ
- Υ ΥΥΥ
- Φ ΦΦΦ
- Χ ΧΧΧ
- Ψ ΨΨ
- Ω ΩΩΩ

A A Δ
B B
C Γ Λ
D Δ
E E
F F
I ‡ Z
H Θ Θ
Θ ⊙ Θ
I
K K K
L V Λ
M M M
N N M
Ξ + X
O O
Π Π
Φ Φ
R R P D
S S Σ Σ
T T †
Υ V Y
Φ Φ
X ↓ Y
Ψ *
Ω

A A Δ
B B
C Γ Λ
D Δ
E E
F F
I ‡ Z
H Θ Θ
Θ ⊙ Θ
I
K K K
L V Λ
M M M
N N M
Ξ + X
O O
Π Π
Φ Φ
R R P D
S S Σ Σ
T T †
Υ V Y
Φ Φ
X ↓ Y
Ψ *
Ω

A A Δ
B B
C Γ Λ
D Δ
E E
F F
I ‡ Z
H Θ Θ
Θ ⊙ Θ
I
K K K
L V Λ
M M M
N N M
Ξ + X
O O
Π Π
Φ Φ
R R P D
S S Σ Σ
T T †
Υ V Y
Φ Φ
X ↓ Y
Ψ *
Ω

A A Δ
B B
C Γ Λ
D Δ
E E
F F
I ‡ Z
H Θ Θ
Θ ⊙ Θ
I
K K K
L V Λ
M M M
N N M
Ξ + X
O O
Π Π
Φ Φ
R R P D
S S Σ Σ
T T †
Υ V Y
Φ Φ
X ↓ Y
Ψ *
Ω

A A Δ
B B
C Γ Λ
D Δ
E E
F F
I ‡ Z
H Θ Θ
Θ ⊙ Θ
I
K K K
L V Λ
M M M
N N M
Ξ + X
O O
Π Π
Φ Φ
R R P D
S S Σ Σ
T T †
Υ V Y
Φ Φ
X ↓ Y
Ψ *
Ω

Δ Δ Δ
 B B
 $\angle$ Γ $\wedge$
 $\triangleright$ Δ
 E E
 F F
 I $\ddagger$ Z
 H B Θ
 $\oplus$ $\odot$ $\ominus$
 I
 K K $\mathbb{K}$
 L V $\wedge$
 M M M
 N N M
 Ξ $+$ X
 O O
 Π Γ
 Φ Φ
 R $\mathbb{R}$ $\mathbb{P}$ D
 S $\mathbb{S}$ $\mathbb{Z}$ Σ
 T T Υ
 Υ V Y
 Φ Φ
 X $\downarrow$ Y
 Ψ $*$
 Ω

A A Δ
B B
C Γ Λ
D Δ
E E
F F
I ‡ Z
H Θ Θ
Θ ⊙ Θ
I
K K K
L V Λ
M M M
N N M
Ξ + X
O O
Π Π
Φ Φ
R R P D
S S Σ Σ
T T †
Υ V Y
Φ Φ
X ↓ Y
Ψ *
Ω

A A Δ
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L V Λ
M M M
N N M
Ξ + X
O O
Π Π
Φ Φ
R R P D
S S Σ Σ
T T †
Υ V Y
Φ Φ
X ↓ Y
Ψ *
Ω

THE Greeks' love of order and system caused them to simplify and regulate the old sprawling alphabetic characters. New forms were invented from disused archaic forms, and after experiment others were discarded. The Greek alphabets fell into two broad divisions: Eastern Greek, the older type introduced by the Tyrian merchants, used in the Aegean area, the cities in Asia Minor and Attica, Aegina, Corinth and her colonies; and Western Greek, somewhat later, and believed to have entered Greece overland from Lydian or Aramean sources, used in most of Greece proper and its colonies.

In suiting the Phoenician letters to the sounds of their own language, the Greeks employed the characters for Aleph, he, yod, and 'ayin to denote the vowels a, e, i and o, and invented a sign for u, adapting a variant form of the Semitic wan. The Semitic heth (a guttural h) became the sign for h in the western, but for e in the eastern Greek alphabets. Semitic teth (emphatic t) became the Greek letter for th; the character for the short o was modified to indicate the corresponding long vowel; and the Semitic Samekh (s or ks sound) was later used to denote the compound ks by the letter x. The remaining Phoenician characters were carried into Greek with little change in values.

The signs of the Ancient Signary are shown not as alphabetic characters but as probable sources of the later letter forms. Alphabets used as basic groups of writing units did not evolve until about 1600 B.C., although the characters must have had phonetic names from the beginning of their use—if only for purposes of identity.

EGYPT PRE- HISTORIC	EGYPT 1st TO 18th DYNASTIES	CRETE PRE- HISTORIC	PHONETIC VALUES	LYDIA ABOUT 1400 B.C.
AA	XDA	A	A	AA
JL	ΠΒΓ	PC	B	BB
CC	ΓCC		G	CC
ΔΔ	ΔΔΔ	Δ		
FE	FEDE	FEDE	E	FEFE
YF	YFZF	YF	V	YFYF
*FI	ΓFI	FI	Z	*FI
HHH	HHH	HHH		
Θ	ΘΘΘ	ΘΘ		
YIQ	YIQ	YQ	I	YQI
*YF	*YK	HK	K	*Y
LL	LL	LL	L	LL
MM	MM	MM	M	MM
Y	YNN	NN	N	Y
FE	FE		S	FE
OO	OO	OO	O	O
PT	PT		P	PT
Q	Q	Q		
Y	Y	Y	R	Y
ΣΣΣ	ΣΣΣ	ΣΣΣ	S	ΣΣΣ
+T↑	+T↑	+T↑	T	T
VVY	VVY		U	VY
Φ	ΦΦ	ΦΦ		
*X	*X↓	X	X	*X
ΦY				
Π				

MEDITERRANEAN
SIGNARY

SEMITIC NAMES	PHONETIC VALUES	TYRIAN	SIDONIAN	PHONETIC VALUES	THERA ABOUT 900 B.C.	ATHENS 400 B.C.	CHALCIS AND COLONIES 800 B.C.	PHONETIC VALUES	ETRUSCAN ABOUT 600 B.C.	EARLY LATIN	ROMAN
ALEPH	A	𐤀	𐤁	A	AA	AA	AAA	A	ANNA	ΛΛΑ	A
BETH	B	𐤂	𐤃	B	BB	BB	BB	B		BB	B
GIMEL	G	𐤄	𐤅	G	ΓC	Γ	ΛC	G,C	γγC	CCG	CG
DALETH	D	𐤆	𐤇	D	ΔΔ	ΔΔ	ΔΔΔ	D		DD	D
HE	E,H	𐤈	𐤉	E	𐤈E	EE	EE	E	𐤈𐤈𐤈	EEH	E
VAU	V	𐤊	𐤋	F,V	F		ΛC	W,F	𐤊𐤊𐤊	FFI	F
ZAYIN	Z	𐤌	𐤍	Z		ZI	I	Z	𐤌𐤌𐤌		Z
CHETH	CH	𐤎	𐤏	E,H	𐤎	𐤎H	𐤎H	H	𐤎𐤎	H	H
TETH	TH	𐤐	𐤑	TH	𐤐𐤐	𐤐	𐤐𐤐𐤐	TH	𐤐𐤐𐤐		
YOD	Y	𐤒	𐤓	I	𐤒YH	I	I	I	I	I	I
KAPH	K	𐤔	𐤕	K	𐤔K	K	𐤔KK	K	𐤔	KK	K
LAMED	L	𐤖	𐤗	L	𐤖𐤖	𐤖𐤖	𐤖𐤖𐤖	L	𐤖𐤖	𐤖𐤖	L
MEM	M	𐤙	𐤚	M	𐤙M	MM	𐤙MM	M	𐤙𐤙𐤙	MMM	M
NUN	N	𐤛	𐤜	N	𐤛N	N	𐤛NN	N	𐤛𐤛𐤛	NN	N
SAMEKH	S	𐤞	𐤟	X	𐤞	Ξ	+	X			
'AYIN	'A	𐤠	𐤡	O	𐤠𐤠	O	O	O		𐤠𐤠	O
PE	P	𐤢	𐤣	P	𐤢P	PP	𐤢PP	P	𐤢𐤢	PP	P
TSADE	TS	𐤤	𐤥					S	MM		
Q'OPH	Q	𐤦	𐤧	Q	𐤦Q	Q	QΦ	Q		QQQ	Q
RESH	R	𐤨	𐤩	R	𐤨R	RR	QR	R	𐤨𐤨𐤨	RRR	R
SHIN	SH	𐤫	𐤬	S	MM	ΣΣΣ	ΣΣΣ	S	ΣΣΣ	SS	S
TAU	T	𐤭	𐤮	T	T	TT	T	T	𐤭𐤭𐤭	T	T
				U	𐤮U	Υ	YV	UV	𐤮𐤮𐤮	VV	UV
				PH		Φ	ΦO	PH	ΦΦ		
				CH		X	↓	X		X	X
				PS		Ψ					Y
				O		Ω					

GREEK
ALPHABETS

ITALIAN
ALPHABETS

THE LATIN ALPHABET

ROMAN civilization owed everything to the Etruscans who imparted to it their culture. The Etruscans migrated to the Italian peninsula from Asia Minor by way of Egypt and Carthage about the eleventh century B.C., after an unsuccessful attempt to invade Egypt. They absorbed the weaker Pelasgians who preceded them and adopted their heritage of Greek culture.

From the Greek colonies in Italy, especially Cumae, Sicily, founded by immigrants from Chalcis in Euboea, who had carried the local script with them, the Latin alphabet was derived. Not until six hundred years after the founding of Rome did the Latins overthrow the supremacy of the Etruscans at the battle of Cumae in 281 B.C. Through these many centuries of national growth our Roman alphabet developed from the Chalcidian Greek forms, being influenced this while by the primitive Pelasgian and Etruscan variants.

Greece became a vassal to Rome with the sack of Corinth in 146 B.C. and the masterful technique of all forms of her art was thereafter exploited by the victor's love of splendour and pomp. Models of Greek letter forms as well as of sculpture and architecture further influenced Roman culture.

The Italo-Greek alphabet was composed of characters for the following : A, B, G (C), D, E, W (F), Z, H, TH, I, K, L, M, N, O, P, TS, Q, R, S, T, U (V), PH and X. The Greek sounds : TH, TS and PH, pronounced as in boat-hook, tight-squeeze, and top-hat, were peculiar to the Greek tongue and therefore were not employed in the Latin alphabet, although they did survive in mutilated form in the Roman numerical signs.

At first C and G were not differentiated (old Latin, ECO—ego) but as the Romans disliked the letter K from a standpoint of design they restricted G to the voiced G sound about the third century B.C. and substituted C for the voiceless K. This modification

ATVNIS
HERAKLE
HEDDACLE

MENRFA
ARTUMES
WENDFA
PDTVMES

MARIS
TURAN
NADIM
TVDAN

MANIOS • MED • FHE • FHAKED • NUMASIOI (Manius me fecit Numerio)

Above is shown the earliest known Latin inscription on metal. The object is a gold fibula found at Praenestina. It dates from about 600 B.C. All the letters are Greek in form. A small dot is placed between each word. The early Romans employed this device to separate words. In classic times they made use of small triangles for this purpose. The custom persists today in many monumental inscriptions.

The names of the Etruscan gods and goddesses below were taken from bronze hand mirrors, which were deposited by the Etruscans in their tombs throughout ancient Etruria in Italy. The style is archaic and Greek with Phoenician characteristics. Some were inscribed from right to left but are shown reversed for comparison with the Chalcidian Greek alphabet in the left margin.

The comparative Latin alphabets to the right show the process of change taking place over a period of time.

usurped in numerical order the old Z (soft S sound) which was not found in Latin. The letter Z was dropped from the Latin alphabet in the third century B.C. but was restored in the first century to write Greek words. It then took its place at the end of the alphabet.

The 'digamma' F, the original but early disused sixth letter in the Greek alphabet (with the sound of our W) was restored by the Romans to represent F.

The letter Y was introduced in the first century B.C. to transcribe the Greek 'upsilon' whose value was that of U (French u). Our Roman letters, Y, V and U are all variants of this same Greek letter.

In the beginning of the Christian era our alphabet of capital letters in form was completely developed with the exception of two letters, J and W, although they did not at this early time have the same phonetic values which we now assign to them.

As in all systems of writing used before their time, the Romans developed two forms of writing—the monumental form, which has been traced herein, and a cursive form used for everyday purposes, derived from the 'capitals.' The easily written cursive styles were adopted by expanding learning and commerce and spread widely throughout Europe by the rise of Christianity. It is from this cursive form of writing, ink on skins or paper, as debased from the inscriptional form as our handwriting is from type, that the small letters (minuscules) of our alphabet were developed. Capital letters (majuscules) were in time only used as decorations at the beginning of a page or chapter. The wonder-

THALNA

APULU

ELACHSANTRE

NETHUNS

ECHTUR

ALKSENTRE

(Juno . Apollo . Alexander . Neptune . Hector . Alexander)

278 — 254 B. C.

253 — 154 B. C.

FROM 154 B. C.

A A A
B B B
C C C
D D D
E E E
F F F
G G
H H H
I I I
K K K
L L L
M M M
N N N
O O O
P P P
Q Q Q
R R R
S S S
T T T
V V V
X X X
Y Y
Z Z

ful Roman capitals were discarded and neglected for hundreds of years and could have been lost to us forever had they not been cut in stone. Only since the Middle Ages have they been revived and re-used.

During the Middle Ages (in minuscule) the j form was derived from the letter i to denote a relative sound as soft g or English y. The two forms i and j were long treated as variations of the same symbol. The graphic separation began roughly in the fifteenth century, but j has only been recognized as an individual letter for about a hundred years.

Also during the Middle Ages a like distinction was made between U and V (Latin, SERVVS—seruus—servus). The letter V is a graphic variation for the vowel U. To represent a Teutonic sound not found in Latin two V's were combined to form a double U—W. The V single and double came into use in English for the consonant U through Anglo-Norman influence (1150-1280) as the Greeks had used it, U—VV. It was introduced through the Runic W in the ninth century to the Anglo-Saxon. The V continued to be used as a variation of the U to the sixteenth century. In the Anglo-Saxon there was no letter V, its sound was denoted by U. In Middle English, twelfth to fifteenth centuries, U came into common use for the voiced F and this U was finally removed into V. Most English V's, especially initial, are in words from the French or Latin. V never stands final in a word. Nearly all V's in modern English are from F's, as in leaf—leaves, half—halves, etc. Our letters U, V, W, Y and F are all from the old Semitic Vau, the sixth letter in the Phoenician alphabet.

This is an inscription from the City of Antinum of possibly the third century B.C. The letters are well proportioned and show much change although the M and N follow the archaic Greek types. These sprawling types were corrected in classic times by making the outside lines vertical. Later Romans and Greeks corrected and characterized many of the letters, discarding the old-time Phoenician slants, such as the cross bars in the E's and A's, making of our alphabet one distinguished for its legibility and graphic beauty.

The beautifully proportioned letters (S P Q R) at this chapter head, are from an obelisk in the Circus Maximus, now in the Piazza del Popolo, Rome. Inscribed in 10 B.C., they are typical of the monumental style of the Classic Age.

This alphabet of classic Roman capitals is re-drawn from inscriptions in the Forum. The sculptor gave to these letters a freedom, a scheme of well distributed curved and straight lines, and underlying balance and gracefulness that has served as an inspiration for all designers of letters from his time. It was to these models that the Italian scribes and type-cutters turned in the fifteenth and sixteenth centuries when they reverted to pure forms and discarded the debased medieval styles commonly known as 'black-letter.'

PAVI PACVIES·MEDIS
VESVME·DVNOM·DED
CA·CVM NIOS·CETVR

OPQ RSTVW XYZ

RICOLAEBISQVAISOLEMBISFRIGORASENS

INTRODUCTION OF THE ROMAN ALPHABET INTO EUROPE

ROME destroyed Carthage, her last great rival for supremacy in the Mediterranean, in 146 B.C., and took over full sponsorship of our Western European culture. In 55 B.C. Caesar, with 10,000 armed men, invaded England, but returned to Gaul for reinforcements in arms and men. He came again to England the following year with 25,000 men and arms to further instruct the inhabitants in the ways of Roman civilization. Along with some of the doubtful benefits of civilization the Romans did introduce the knowledge of writing.

In Rome and her provinces, from the beginning of the Christian era, Roman letters, both in the monumental and manuscript forms, varied with the method used to inscribe them. The earliest manuscripts of parchment, vellum or papyrus were written in letters known as square capitals, with quill* or reed and ink. As the scribes became more expert in this medium, acquiring speed in execution, tendencies toward cursiveness and other departures from the classic capitals crept in.

*Our word 'pen' is derived from the Latin 'penna' (feather).

Proficiency in the required purpose of producing cheap and quick copies of advertisements, public notices, political and religious tracts, etc., besides copies of the more scholarly works which often ran into thousands of copies, became a necessity, and the need of a freer, more rapid style of writing became evident.

The change from the square capitals (above) became quite marked after a period of time. As we examine a portion of a manuscript copy of Virgil's Georgics (below) in a style known as Rustic capitals, but really Square capitals more rapidly written, we find the letters F, L and B extending above the other letters in the line. The F is drawn above the line to distinguish it from the E : while the L is extended to distinguish it from the I. The letters B, D, P and R so closely resemble each other that the scribe has commenced a process of differing them that does not cease until the D and B are altered to both contain stems which are drawn above the line, and the P is drawn below the line. The A has lost its cross bar and the serif at the left turns up to retain the A character, while the heavy stroke extends from the top. These and other changes in the forms of the capitals brought about a completely new style of writing known as Uncial.

These changing forms of letters had their influence on the style of letters used in monumental inscriptions after the third century. Over the page is a piece of third century writing in Uncials. It is from an inscription on a pedestal at Thamugandi

DUM·FOVE·AGNEME·SIBI·PRAEFERAT·ILLE·VERETUR
PARCIVS·ISTAVIR·ISTAMEN·OBICIENDAM·EMENTO
NOVIMVS·EI·QVITET·TRANSVERSATVENTIBVS·CIRCI

VOCATIO

(Timgad), North Africa. Notice the almost complete change of many of the letters to the forms of small letters or as printers now call them, 'lower case' letters. This early attempt to dramatize part of the inscription by making the caption or title larger than the rest of the text, may be said to mark a beginning in Graphic Layout.

P. FR. PUDENTI. POMP.

NIANO. C. U. E. P. C. A.

CIVIS PATRIAE MILITARIQUE

MILITARIQUE

The early Roman possessed another variant of the capital letters beside the Uncial style, that is, an everyday handwriting or cursive style.

The Romans commonly employed a writing tablet covered with a thin surface of wax. A stylus was used to scribble through the wax to the darker surface of the tablet. An unusual specimen of this style of every day writing is shown. It is reproduced from a collection of eighth century copies of early cursive hands published by Mabillon* in 1681.

Roman
Uncials
(Third
Century)

This style of writing was current in Rome and her provinces in the first centuries of the Christian era. Our small letters did not come to us through this type of script. This is a debased rendering of the Roman capitals and does not have the character of the script that appears a thousand years later. The Italian handwriting used during the Renaissance, and after which style Francisco de Bologna in Venice fashioned the first Italic type for the Venetian printer-publisher, Aldus Manutius (1495), and from which our handwriting is descended, had the construction and resulting legibility of the Caroline book-hand on which it was based.

The Uncial letters were vigorous and legible. They became popular as they were easier and quicker to produce than the Square capitals, but still too angular to be written with any great rapidity. A resulting roundness in Uncial writing developed in the various regional systems : Lombardic in Italy, Visigoth in Spain, and Merovingian in the Frankish Empire. Wherever Roman civilization had spread, its magic alphabet had been introduced. Legend tells us that Saint Patrick brought the art of writing to Ireland from Gaul about the year 450 A.D.

In the Irish and Anglo-Saxon writing in particular, further improvements developed. In the seclusion of their monasteries, apart from warring Europe, the Irish monks developed their Uncial book-hand to a state of great beauty and legibility.

The art of writing and other forms of Roman culture had languished in England from the time of the withdrawal of the Roman governors. With the Saxon invasion of England the effects of Roman civilization was largely destroyed. Christian missionaries carried the Irish Uncials into England with the revival of learning in the seventh century and founded schools of writing. The Irish Uncials greatly influenced the Anglo-Saxon book-hand which was later taught by Alcuin of York when instructor of writing at the convent of St. Martin at Tours, France, to which he was invited in 796 by the Emperor Charlemagne.

Roman
Cursive
(First
Century)

C. JULI C. E. V. T. E. V. A. M. B. R. U. M. L. P. I. V. S. N. E.
S. O. L. U. S. P. L. A. U. A. M. M. I. S. M. O. L. I. T. U. R. G. O. D. M. I. S. S. I. T.

(Di Re Diplomatica).

abcdefghijklmnopqrstuvwxyz



A style of writing was developed at Tours by Alcuin and his followers based on the forms of the Irish Uncials, combined with the best of other minuscule forms. Capital letters were redeveloped on the structure of the older Rustic and Square forms and used in titles and chapter headings. The beginnings of our modern punctuation system were devised at this time. The style of this form of writing, called Caroline minuscule, became the standard book-hand. It was taught to the Monks attracted to Tours from all parts of Europe and returned with them to their own countries. These men copied and preserved from one generation to the next the Scripture

An alphabet of Irish Uncials constructed from the "Book of Kells" (Sixth Century)

and other literary works of the past and kept the light of knowledge burning through the Dark and Middle Ages.

The complete destruction by the Arab conquerors of the great library at Alexandria in the seventh century and the appalling loss to mankind of its treasury of ancient learning seems to have been a warning of what was to come. War and destruction, religious intolerance, plague and pestilence, all had their sway over Europe and its peoples. Art, literature and other forms of creativeness were abandoned for many centuries. Religious dogma controlled men's minds and dwarfed them. But then a change took place—the fourteenth century brought a rebirth in ideas and ideals to thinking men in Europe. It began a new age of discovery, exploration, invention and science. The revival of Greek learning, the astronomical beliefs of Copernicus and the discoveries of Galileo changed men's conceptions of the universe. Man began to think in new terms and broke with the medieval order.

ICENTESENIM
SESSSESAPIEN
TESSTULNFACI
SUNTEIMUTAE
RUNTGLORIAM

Uncial Letters from "Spaculum of St. Augustine" (Seventh Century)

The invention of printing, which concerns us most here, so important in the spread of knowledge for which all men have thirsted since the Renaissance, came about not as the brilliant idea of any one man, but through a necessity. The process of embossing with a seal was practised in Babylonian times, and printing pages of characters in ink from wood blocks had been known to the Chinese for a thousand years. Printing from movable types cut in wood is said to date from about the twelfth century in China.

Langendunā tenæ. Wāt de Sueno. qđ tenat. dlric teni regē.

p. 7. 7. p. 4. h. 8. Sēp. 11. car. in dñio. 7. in. car. hom. 7. v. uitt. Tc. in. se

Anglo-Saxon Minuscules—An extract from "Domesday Book (1086)

nouas adisse p̄pos maria trā-
fisse: ut eos quos & libris no-

"Black
Letter"
Printing
Type,
Gutenberg
(1461)

Illiteracy, Ignorance and Great Piety had long been the three R's of Christian Europe. The idea of printing books was not at first a welcome invention. In France, a statute of 1260 reads, "No moulder may mould or cast anything with letters on it, and if he does he will be at the King's mercy, himself and his goods; each letter must be made separately." The first printers were not moved by ideals either, nor were they in league with the devil. They were seeking a quick method of counterfeiting the work that had always been done so laboriously by hand.



The earliest efforts in the art of printing in the fourteenth century were from wood blocks on which had been engraved the pictures and text. The sheets were proved by hand with the simplest form of press and bound together to form a simple inexpensive book, called a Block-Book. The subjects were usually of a religious nature and the books came to be known as the Pauper's Bible.

The first type cutters naturally reproduced the style of letter then current. Black-letter was the style, a carry-over from the Middle Ages, a debased rendering of the once beautiful Caroline minuscule. Black-letter was long used in England but was destined to give way to the Roman faces brought out by the later Italian printers. Above is a specimen of movable wooden type reputed to have been cut by Johann Gutenberg and used at Mainz, Germany, in 1455. At the top of the next page is shown a specimen of William Caxton's type of 1477, after the English version of Black-letter.*

Italy was the seat of the Renaissance and the centre of learning in the fifteenth century. Less bound by convention than their northern neighbours the Italian printers were the first to discard the Gothic characteristics from their types. They turned away from the ugly examples of the day and chose the legible ninth century Caroline minuscules for their models. Capital letters were re-fashioned from the forms of classic times.

*The eighth character in the Caxton specimen is a long s. In the Middle English period it was written es. The cross bar on the left is the remnant of the hyphen substituted for the dropped e.

Quare multarum quoq; gentium patrem diuina oracula futurū
ip̄so benedicēdas oēs gentes hoc uidelicet ip̄sum quod iam nos u

It it plese ony man spirituel or temporel to bye ony pypes of two and thre comemoraciōs of Calisburi use

Nicolas Jenson, a Frenchman, in 1470 at Venice cut his beautiful Roman font. A specimen appears at the foot of page 60.

"Black Letter"
Printing
Type.
Caxton
(1477)

Jenson's classic types have served as models for all who followed, to this day.

Returning to England a hundred years later we find the expected improvement in the graphic arts. The more legible Roman forms have superseded the Black-letter forms of Caxton's time, which have been relegated to a decorative and legal use, and are seldom employed in book text. Black-letter evolved in England under the hands of her penmen into the Court and Chancery and other engraving styles. These in turn were discarded in favour of the English Round Hand but have survived to this day under the general quaint name, 'Old English.' The Round Hand, a beautiful, slanting but legible script, set the standard for our present day handwriting.

Of all the typefounders in the eighteenth century we find one house whose production led all others in excellence, not only in the estimation of their contemporaries but in the proof of survival—William Caslon and Son. For two centuries, Caslon Roman types have had the most profound influence on typographical standards.

William Caslon was apprenticed to an engraver of ornamental gunstocks and barrels in London. At about the age of twenty-four he set up his own shop (1716) where he did silver-chasing and cut tools for bookbinders. At times he cut lettering for bindings and punches for type. Caslon set up his own type foundry about 1720 and issued his now famous Broadside of specimens in 1734. The heading of this specimen sheet as it appeared four years later with a change of address is shown across these pages. Caslon was joined by his son, William Caslon II, in 1742, who worked jointly with him and produced work of unequalled merit until the partnership was divided by the death of the elder Caslon in 1766. It seems fitting that this story should end at this point, for of all the men who aided in the formation of our alphabet, Caslon and Son surely made a great contribution.

Cast in forms of near perfection, Caslon types have a rightness and legibility, an artist's balance and beauty in individual forms and a 'colour' in mass that has defied for two hundred years all attempts at improvement. That they will ever be replaced or disregarded in the field of fine printing in the English language, is doubtful.

nt, sed etiam magnis. At mihi fama uilius constet,
robetur in me nouissimum ingenium. Absit à iocor

"Italic" Printing Type, Bologna (1495)

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THIS story has only mentioned the writing of the civilizations that I believe contributed substantially to the forms of our own English alphabet. There are many other forms of writing. Some are understandable but the method and the language of others to this day remain a mystery.

The writing of the ancient Hittite nation has had no mention. The Hittite nation flourished from about 2500 B.C. and overlapping the time Knossos in Crete and the sixth city of Troy faced each other across the Aegean Sea and rivalled each other for supremacy of the Aegean area. A warlike and conquering Indo-European people who introduced both iron and the domesticated horse in Asia Minor, they were probably but the remnants of a greater and earlier civilization. They rose to strength equal to that of Egypt at the height of her influence and contested with her the leadership of the ancient world. The Hittites early suited the ancient cuneiform system to their language but developed, too, a hieroglyphic form of writing similar to those of Egypt and Crete for their monumental inscriptions. Many of these symbols are almost identical in form to the Egyptian, Cretan and later Semitic forms. Examples of the Hittite inscriptions have been found strewn over Asia Minor from the Aegean to the Euphrates. This hieroglyphic system has not been fully deciphered but there can be no doubt that it, too, had its influence on the writing of the Semitic nations and the early Greeks and so has its bearing on our own forms.

The meaning of the Maya and Aztec hieroglyphs is lost and has not been restored. Four examples of the Maya and only a few fragments of the Aztec writing on paper exist. The rest went up in smoke as offerings to the God of the Spanish conquerors.

The written literature of the once great nations of Mexico and Central America has all but perished from the face of the earth. Except for the numerical signs only a few of the symbols are understood.

There is, too, the mystery of the origin of the hieroglyphs of the lost people of Easter Island in the South Seas and the syllabary of the Caroline islands in the Pacific.

The story of the formation of the Runic alphabets of the Scandinavian and Gothic races, the Oghams—the ancient Celtic alphabet, and the Russian alphabet, all derived from the Greek alphabets, is another interesting study. But it leads down a bypath I could not follow in this limited introduction.

The story of the development of the Chinese pictographic system and the stories of the Hebrew and Arabic alphabets, I hope will interest those who will seek them.

In grateful appreciation and with the hope that others will enjoy these works on this most fascinating subject, I include this bibliography with my warmest recommendations.

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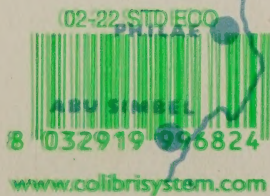
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